

A STUDY ON VIRANAM

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INTRODUCTION

Mother India is not only pride to be the land for tradition and culture but also for its own indigenous system of medicines. Among all other systems, Siddha system of Tamilnadu has its own remarkable value in enrichment of human life. Siddhars, the spiritual scientists of Siddha system had profound knowledge about the universe. They shared their spiritual experience, knowledge and wisdom with the human beings and guided them in achieving salvation which is the ultimate aim of human birth.

According to Siddha system the human body is the replica of the universe so are the food and drugs irrespective of their origin. Siddha system believes that all objects in the universe including human body are composed of five basic primordial elements namely earth, water, fire, air and space.

“அண்டத்தில் உள்ளதே பிண்டம்

பிண்டத்தில் உள்ளதே அண்டம்”

- சட்டமுனி ஞானம்.

The coordination operation of the first matter and energy is said to be the root cause for the formation of the basic five elements; which in turn has created the universe(Macrocosm) and all the objects in it including the human organism(Microcosm). This doctrine theory is called Siddha work as “Anda Pinda thathvam” which deals with the man and his relationship with nature.

The human body is a conglomeration of three humours and seven physical components. The food is considered to be the basic building material of human body, which gets processed into humours, tissues and wastes. The equilibrium of humours, body tissues and wastes are considered as health and its disturbance or imbalance leads to disease.

It is seen that Siddha system has been developed purely by the contribution of siddhars on their own line of thinking and achievements in the field of their research. It is founded on the basic principles of nature and its elements, after careful and thorough study of the human system.

The main aim of the physician was for long and healthy life. They advised to refrain from anger and desire to keep the mind tranquil along with proper diet to keep the body healthy. They attached much importance to the personal hygiene.

In human body, Skin is an extraordinary structure which acts as a barrier separating the potentially harmful environment from the body's vulnerable interior. Skin problems are not often dramatic but cause considerable discomfort and much disability.

Siddha system deals with the spirit of multidimensional approach in healing simple and chronic ulcers of skin with a very good range of drugs. The common herbs and parts of trees were used mainly as medicines. There was reference of their using the metals and non-metals as medicines.

“மறுப்பது உடல்நோய் மருந்தென லாகும்

மறுப்பது உளநோய் மருந்தென சாலும்

மறுப்பது இனிநோய் வரா திருக்க

மறுப்பது சாவை மருந்தென லாமே”

- திருமூலர் திருமந்திரம்

Medicine is the one that cures physical ailments, psychological ailments, prevents ailment and that bestows immortality.

“நெய்க்கிழி வைக்கப்பட்டார் நெய்ப்பத்தல் கிடத்தப்பட்டார்

புக்குழி எக்கம் நாடி இரும்பினால் போழப்பட்டார்”

‘முதுமரப் பொந்து போல முழுமெய்யும் புண்களுற்றார்க்கு

இது மருந்தென்ன நல்லார் இழுதுசேர் கவளம் வைத்து”

- சிந்தாமணி காந்தருவதத்தை இலம்பகம்.

“உடலிடைத் தோன்றிற்று ஒன்றை அறுத்ததன் உதிரம் ஊற்றிச்

கடலுறச் சுட்டு வேறோர் மருந்தினாற் றுயரந்தீர்வர்”

- கம்பராமாயணம்

Among all siddhars, Siddhar Theraiyar is well known for his surgical treatments. Textbook of Siddhar Aruvai maruthuvam quotes from the ancient literatures and epics about the surgical procedures carried out those days.

The basic principles and methods of surgery like incision, excision, separation, anastomosing, suturing, application of bandage, cauterization and amputation were known and practiced by Siddhars. Principles of asepsis were known and antiseptics were made use of. Sirappu maruthuvam is exclusively unique among divine treatments in dealing lot of dermatological problems.

*(In this dissertation wherever the words **viranam** and **pungal** are used, it denotes the same meaning of **skin ulcers**.)*

AIM AND OBJECTIVES

AIM:

To evaluate the therapeutic efficacy of the Siddha formulation **“KUKKIL CHOORNAM”** (INTERNAL) and **“VIRANA SANJEEVI THYLAM”** (EXTERNAL) in **“VIRANAM”** (SKIN ULCERS). 40 Cases of both sexes and varying age groups were selected for the study in the Post Graduate Department of Sirappu Maruthuvam at Government Siddha Medical College, Palayamkottai.

OBJECTIVES:

- To collect and review the ideas mentioned in various ancient Siddha literatures about Viranam and also to know the efficacy of the trial medicine.
- To study the clinical course of the disease Viranam with keen observation on definition, etiology, classification, pathogenesis, clinical features, diagnosis, treatment, prognosis, complication and prevention.
- To have an idea about the prevalence with reference to age, sex, occupation, socio-economic status, diet and habits.

- To expose the clinical diagnostic methods mentioned by Siddhars to know how Viranam alters the normal conditions under the topics of uyir thathukkal, udal thathukkal and envagai thervugal.
- To extend the correlation of Viranam in Siddha aspect with skin ulcers in modern science.
- To demonstrate the importance of Viranam in Sirappu maruthuvam by exploring the concepts in various Siddha texts.
- To evaluate the Biochemical analysis and Pharmacological studies of the trial.
- Finally to create awareness among the patients in order to avoid further progression and recurrence of the disease.

REVIEW OF LITERATURES

SIDDHA ASPECT

IYAL:

Viranam is defined as any damage to the epithelial surface of the skin or mucous membrane. It may be an open sore, a sore with or without suppuration and discharges of matter.

CHARACTERS OF VIRANAM:

‘புண்ணும் வெளுத்து நீர்மிகுந்து போதக்குத்துவலி மிகுந்தால்
உண்மைப்படவே செங்கலங்கள் கொள்ளாதிருக்கி லான் செய்யும்
திண்மைப்படவே செங்கலங்கள் யிரத்தமாகிற் தீராது
நன்னிக்கீழாய்ச் சீழ்விழுந்து பின்னைநனைக்குஞ் செம்புண்ணே”

- அகத்தியர் 2000

புண் வாய் வெளுத்து அதிலிருந்து நீர் கசிந்து குத்து வலி இருந்து சிவப்பு சதை வளராமல் இருந்தால் புண்கள் தூர்த்து ஆறிபோகும். சிவப்பு சதை அதிகமாக வளர்ந்தால் புண்கள் ஆறாமல் சீழ் பொசியும்.

AETIOLOGY:

According to the aetiology Viranam is due to,

1. Imbalance in the uyir thathukkal
2. Trauma

CLASSIFICATION OF VIRANAM:

There are two types of viranam. They are

1. Thutta viranam
2. Athutta viranam

1. THUTTA VIRANAM:

Thutta viranam is caused by the vitiated uyir thathukkal like vatham, pitham and kabam. It is divided into sixteen types according to the separation or combination of deranged uyir thathukkal.

2. ATHUTTA VIRANAM:

Athutta viranam is caused by the trauma which can be either mechanical, physical or chemical.

THUTTA VIRANAM:

These are classified into 15 types. They are,

1. Vali pun:

Scanty discharge with foul smell. There will be pricking pain, dryness in these ulcers.

2. Azhal pun:

Yellow in colour, rapid spreading in nature. The discharge is clear, with pain, burning sensation and redness.

3. Iyya pun:

Itching, pale in colour. The discharge is copious and sticky in nature.

4. Vali pitha pun:

Clear and Scanty discharge with foul smelling, yellow in colour.

Pricking pain, redness, dryness, burning sensation are seen.

5. Vali iyya pun:

Itching, pricking pain, burning sensation, dryness are found. The discharge is scanty and sticky in nature.

6. Pitha iyya pun:

Rapid spreading ulcer, pale in colour. Itching, pain, burning sensation are found. Discharge is sticky in nature.

7. Mukkuttra pun:

Mixture of vali, Azhal and Iyya pun features.

8. Kurudhi pun:

Red in colour coral like. It has the characters of thutta varanam.

9. Kurudhi pitha pun:

Ulcer is red and yellow in colour. Discharge is clear with blood stain. Burning sensation is present.

10. Kurudhi vali pun:

Ulcer is red in colour. Discharge is blood stained. Pricking pain, vomit is found.

11. Kurudhi iyya pun:

It is red in colour. Swelling, vomiting are present. Serous discharge is found.

12. Kurudhi vali pitha pun:

Mixture of both features of kurudhi vali, kurudhi pitha pun.

13. Kurudhi vali iyya pun:

Mixture of both features of kurudhi vali, kurudhi iyya pun.

14. Kurudhi pitha iyya pun:

Mixture of both features of kurudhi pitha, kurudhi iyya pun.

15. Kurudhi mukkuttra pun:

Mixture of all the three features of kurudhi pun.

16. Velutha pun:

It is pale in colour, floor elevated and there will be no discharge seen.

TYPES OF PUNGAL:

The skin ulcers are classified into twenty two types in T.V.Sambasivam pillai dictionary. They are as follows,

- | | | |
|-----------------|---|-------------------|
| 1. Neruppu pun | - | Burns |
| 2. Mega pun | - | Venereal ulcers |
| 3. Vellai pun | - | Gonorrheal ulcers |
| 4. Aara pun | - | Chronic ulcers |
| 5. Kiranthi pun | - | Syphilitic ulcers |

6. Ottu pun	-	Contagious ulcers
7. Kuzhi pun	-	Perforating ulcers
8. Oduvu pun		
9. Raaja pun	-	Diabetic carbuncle
10. Karappan pun	-	Eczema
11. Parangi pun	-	Syphilitic ulcers
12. Vetu pun	-	Incised wound
13. Kaaya pun	-	Traumatic ulcers
14. Azhi pun	-	Sloughing ulcers
15. Korukku pun	-	Chancre
16. Veditha pun	-	Fissured ulcers
17. Azhar pun	-	Inflammed ulcers
18. Rasavekkatu pun	-	Mercurial poisoning ulcers
19. Puttru pun	-	Fungal ulcers
20. Vayittru pun	-	Gastric ulcers
21. Thulai pun	-	Sinus
22. Ari pun	-	Rodent ulcers

CLASSIFICATION OF ATHUTTA VIRANAM:

Athutta viranam is classified into forty five types in “**Siddhar Aruvai Maruthuvam**”. It is classified into forty nine types in “**Anupava vaidhya deva ragasiyam**”. The pathological state of uyir

thathukkal affects the seven udal thathukkal (Body tissues) which leads to viranam of several types according to the combination of the imbalanced uyir thathukkal(mukcuttram).

Sathio viranam:

It is one of the types of Athutta viranam due to trauma. It is of eight types.

1. Krishta viranam:

Trauma due to thorn, log, horn produce abrasions, ulcer and it is non-healing in nature.

2. Avakatha viranam:

It is perforating and deep-seated.

3. Vichinna viranam:

It seems to be incised ulcer in appearance.

4. Piravilambi viranam:

The base of the ulcer rests on the bone which is exposed.

5. Nibathiga viranam:

The bone is found in the centre of the ulcer surrounded by necrosed tissue.

6. Vitha viranam:

Traumatic ulcer caused by stones.

7. Pinna viranam:

Traumatic ulcer caused by sword, knife and sharp instruments used as arms and weapons in wars.

8. Vidhalidha viranam:

Pressing the bleeding ulcer further produce this type of ulcer.

Stages of pathogenesis:

Three basic physiological forces vatham, pitham, kabam are named then uyir thathukkal. These three life humours when present in balanced state, it maintain and retain normal bodily functions and when imbalanced lead to pathogenesis of diseases. The process of pathogenesis has a definite sequential pattern distributed over a period of time. These periods have been classified as six stages of pathogenesis. They are,

- ❖ STAGE 1 - Skin is red with soft underlying tissue.
- ❖ STAGE 2 - The redness of skin, swelling and loss of outer skin layers
- ❖ STAGE 3 - Necrosis occurs through the deep layers of skin
- ❖ STAGE 4 - Necrosis of the muscle
- ❖ STAGE 5 - Necrosis with fat tissue and muscle exposed
- ❖ STAGE 6 - Spreads to bone and joints

CONCEPTS OF ULCER HEALING:

Each of aforesaid uyir thathukkal has certain functions to execute in its normal and abnormal states and this aspect is reflected in the post-traumatic state when each one of these thathu show alternate dominant and subsidiary roles as per the need of the stage of the healing process. This can be summarized in three stages.

“வாதமாய்ப் படைத்துப் பித்த வன்னியாய்க் காத்துச் சேட்ப

சீதமாய்த் துடைத்துப் பாராந் தேகத்திற்குடியா மைந்து

.....

- தேரன் மருத்து பாரதம்

1. STAGE OF TISSUE ORGANISATION

“ வாதமாய்ப் படைத்து”

The tissue that is injured break down into debris and is removed by phagocytosis. The remaining viable tissue constituents are converted into primordial thathu forms. From this primordial thathu pool, new tissue complexes are to be organized. At this stage, the action of vatham is more, pitham is normal, kabam shows reduced action.

2. STAGE OF INCREASED LOCAL ENZYMATIC ACTIVITY AND APPEARANCE OF GRANULATION TISSUES

“பித்த வன்னியாய்க் காத்து”

At this stage, the breakdown products of the ulcer area are cleared. The thathu syncytium is remobilized into differentiation of all forms. The general metabolism is speeded up due to vigorous local enzymatic activity at cellular or molecular level. As a result granulation tissue appear. Its systematic response is reflected as general malaise and fever. At this stage, action of pitham is more, vadham is less and kabam is normal.

3. STAGE OF PROPER HEALING AND ANABOLIC ACTIVITIES

“சேட்ப சீதமாய்த் துடைத்து”

After appearance of granulation tissue in this differentiation and organization of cellular complexes and tissue structure. At this stage, the action of kabam is more predominant, pitham is decreased and vatham is normal.

CLINICAL FEATURES OF VIRANAM:

The clinical features of viranam depends upon the predominance of the imbalanced uyir thathukkal called as mukkuttram and also the udal thathukkal which are affected.

MUKKUTTRAM**SYMPTOMS**

Vatham	-	Pain and Swelling
Pitham	-	Heat and Burning sensation
Kabam	-	Discharge, slough and pus

NOI KANIPPU (DIAGNOSIS):**PORIYAL ARITHAL:**

Porigal(sense organs) are instruments with receptors which perceive the five senses with the help of Gnanenthiriyams, the organs of perception. They also give protection to the body.

1.MEI (skin)	-	With air it perceives sensation	-	Affected
2.VAAI (Tongue)	-	With appu it perceives taste	-	Normal
3.KANN (Eye)	-	With theyu it perceives vision	-	Normal
4.MOOKU (Nose)	-	With prithvi it perceives smell	-	Normal
5.SEVI (Ear)	-	With aagayam it perceives hearing-	-	Normal

PULANAL ARITHAL:

Pulangal are the faculties by which human beings perceive stimuli originating from outside or inside the body.

- 1.SUVAI (Taste)** - Normal
- 2.OLI (Vision)** - Normal
- 3.OORU (Sensation)** - **Affected**

The skin is affected in which there will be symptoms like pain, burning sensation, itching, numbness, discharge. The pain may be pricking, cutting or piercing in nature according to the type of ulcer. The colour of the ulcer may be red, yellow or white. The discharge may be serous, bloody, white or purulent if it is infected. The shape and size of the ulcer varies according to the type of ulcer and injury. There may be foul smelling in the discharge due to necrosis of the tissue.

4.OSAI (Hearing) - Normal

5.NAATTRAM (Smell) - Normal

UYIR THATHUKKAL:

VAATHAM:

- | | | |
|-----------------------|---|-------------------|
| 1.PRAANAN | - Controls respiratory organs | - Normal |
| 2.ABAANAN | - Helps in excretion and ejaculation | - Normal |
| 3.VYAANAN | - Perceives sensation through skin | - Affected |
| 4.UDHAANAN | - Resides in navel, neck and nose | - Normal |
| 5.SAMAANAN | - Controls all the other vaayus | - Affected |
| 6.NAAGAN | - Responsible for blinking | - Normal |
| 7.KOORMAN | - Yawning and closing of mouth | - Normal |
| 8.KIRUGARAN | - Salivary and nasal secretion | - Normal |
| 9.DEVATHATHAN | - Produce laziness, tiredness | - Normal |
| 10.DHANANJEYAN | - Expels third day from skull after death | - |

PITHAM:

- | | | |
|--|---------------------------|-------------------|
| 1.ANAL PITHAM (Aakkanal) | - Helps in digestion | - Normal |
| 2.RANJAKA PITHAM (Vanna eri)- | Increase blood volume | - Normal |
| 3.SAATHAKA PITHAM (Aatralangi)- | Executes desired function | - Normal |
| 4.PRAASAKAM (Olloli thee) | - Located in the skin | - Affected |
| 5.ALOSAKAM (Nokkazhal) | - Located in the eyes | - Normal |

KABAM:

- | | | |
|-------------------------------------|--------------------------|----------|
| 1.AVALAMBAKAM (Ali iyam) | - Located in the lungs | - Normal |
| 2.KILETHAKAM (Neerpi iyam) | - Located in the stomach | - Normal |
| 3.BOTHAKAM (Suvaikaan iyam)- | Located in the tongue | - Normal |
| 4.THARPAKAM (Niraivu iyam) | - Located in the head | - Normal |
| 5.SANTHIKAM (Ondri iyam) | - Located in the joints | - Normal |

UDAL THATHUKKAL:

The tissues of the body are called as Udal thathukkal. They are seven in number.

- | | | |
|-------------------|-------------------------------------|-------------------|
| 1.SAARAM | Strengthens body and mind | - Affected |
| 2.SEENEER | Stabilises knowledge,power,strength | - Affected |
| 3.OON | Provides shape and growth to body | - Affected |
| 4.KOZHUPPU | Gives lubrication to organs | - Affected |
| 5.ENBU | Protects internal organs | - Affected |

6.MOOLAI	Strengthens bone tissue	- Normal
7.SUKKILAM/	Involves in reproduction	- Normal
SURONITHAM		

ENVAGAI THERVUGAL:

Noi kanippu (Diagnosis) in Siddha system is mainly based on the following eight methods. These eight diagnostic stools are unique methods in Siddha system of medicine.

‘நாடிப்பரிசம் நாநிறம் மொழிவிழி

மலம் முத்திரமிவை மருத்துவராயுதம்”

- தேரர் நீர்க்குறி, நெய்க்குறி

நாடி, ஸ்பரிசம், நா, நிறம், மொழி, விழி, மலம், முத்திரம் இவை அனைத்தும் எண்வகைத் தேர்வில் அடங்கும்.

1. Naadi (Pulse):

Pulse reading is very important in Siddha diagnosis and an excellent method also. The pathological change in the body is diagnosed by the alteration in the normal ratio of Vatham, Pitham and Kabam as 1:1/2:1/4 respectively.

In Viranam the followind naadi can be seen.

Vathakabam, Pitha kabam,Vatha pitham,Kabam.

ஐய நாடி

‘தானமுள்ள சேத்துமந்தா னிளகில் வெப்பு

சயமீளை இருமல்மந் தார காசம்

ஈனமுறுஞ் சந்நிவிட தோடம் விக்கல்,

இருத்தோகங் கரப்பான் விரண தோடம்

மானனையீர் சூலைதிரள் வியாதி வீக்கம்

வருஞ்சத்தி சுவாசம்நெஞ் சடைப்பு தூக்கம்

ஏனமுறுங் காமாலை பாண்டு சோபை

ஏழுசுரங்கள் பலதுக்கம் விடமுண்டாமே”

- சதக நாடி

2. Sparisam (Sensation):

Any abnormal change in the skin pertaining to temperature, colour, texture, discharge, appearance, sweating, abnormal growth, pain, tenderness should be examined.

In Viranam there will be abnormal change in the aforesaid features of the skin.

3. Naa (Tongue):

Colour, appearance, taste, speech, deviation, wasting are to be examined.

4. Niram (Colour):

Colour of the skin is noted.

5. Mozhi (Speech):

Speech should be examined.

6. Vizhi (Eyes):

Colour, lacrimation, Pupillary reflex, Acuity of vision should be noted.

7. Malam (Faeces):

Colour, texture, quantity, any bleeding and mucous are seen.

8. Moothiram (Urine):

Urine is collected for the Neerkuri and Neikkuri examination.

NEERKKURI

நீரின் பொதுக்குணம்:

‘வந்த நீர்க்கரி எடை மணம் நுரை எஞ்சலென்

றைந்தியலுளவவை யறைகுது முறையே”

- தேரர் நீர்க்குறி நெய்க்குறி

Niram - Colour

Edai - Specific Gravity

Manam - Smell

Nurai - Froth

Enjal - Quantity of urine voided

In Viranam straw colour urine is found in most of the patients and pale colour in some patients.

NEIKKURI

நெய்க்குறி

பார்க்கும்விதம்

‘நிறக்குறிக் குரைத்த நிருமாண நீரிற்

சிறக்க வெண்ணெய்போர் சிறுதுளி நடுவிடுத்

தென்றுறத் திறந்தொலி ஏகாதமைத்ததி

னின்றதிவலை போம் நெறிவிழியறிவும்

சென்றது புகலுஞ் செய்தியை புணரே”

- தேரர் நீர்க்குறி நெய்க்குறி

Neikkuri is known for its significance in assessing the uyir thathukkal which is affected. The patient's urine is collected early morning and viewed before 11/2 hrs in direct sunlight. A gingelly oil drop is placed in the urine. The spreading nature and shape of the oil drop is noted.

‘அரவென நீண்டினட்கே வாதம்”

‘ஆழிபோற் பரவின் அட்தே பித்தம்”

‘முத்தொத்து நிற்கின் மொழிவதென் கபமே”

“அறவிலாழியும் ஆழியில் அரவும்

அரவின் முத்தும் ஆழியில் முத்தும்

தோற்றில் தொந்த தோடங்களாமே.”

- தேரர் நீர்க்குறி நெய்க்குறி

1. If it spreads like a snake, it is vatha disease.
2. If it spreads like a ring, it is pitha disease.
3. If it spreads like a pearl, it is kaba disease.

Snake in ring, Snake in pearl, ring in pearl are found in thontha disease.

PROGNOSIS:

There are certain factors which plays an important role in the prognosis of ulcers.

- ❖ It depends upon the constitution of the uyir thathukkal and udal thathukkal in the body.
- ❖ Age of the patient is important.
- ❖ Ulcers in front of legs along long bones, medial aspect of thigh, axilla, heel, eye, breast, joints heals later when compared to other ulcers.
- ❖ Ulcers in Diabetes, Tuberculosis, Leprosy shows poor tendency to heal.
- ❖ Foreign bodies present in the ulcer shows poor prognosis unless it is removed.

LINE OF TREATMENT:

First the patient should be kept in the favourable environment for ulcer healing. He/ She is asked to avoid any physical activity. Proper hygiene should be maintained.

15 inpatients were given the first day with vellai ennai - 15ml at early morning with hot water. From the second day the trial drugs kukkil choornam and virana sanjeevi thylam were given.

Treatment for Acute ulcers:

- ❖ Sterilization of the ulcer with clean cotton swab.
- ❖ Anti-microbial wash is used to prevent infection with Vengaara neer.
- ❖ Prevention of bleeding in case of fresh ulcers.
- ❖ Internal drugs for ulcer healing is used.
- ❖ External drug is applied over the ulcer.

Treatment for Chronic ulcers:

- ❖ Sterilization of the ulcer with clean cotton swab.
- ❖ Anti-microbial wash is used with Vengaara neer.
- ❖ Debridement is done if there is any slough, foreign body, pus and necrosed tissue.
- ❖ Internal drugs for ulcer healing is used.
- ❖ External drug is applied over the ulcer.

Dressing with Aloe vera:

Aloe vera gel is separated from the skin and cleaned with water. It is then placed in the sterilized dressing cloth and kept over the ulcer.

The following drugs can also be used for sterilization.

- ❖ Thiriphala decoction
- ❖ Neem bark decoction
- ❖ Padikaara neer
- ❖ Arasampattai kudineer
- ❖ Aalampattai kudineer

Bleeding can be arrested by surgical suturing in case of severe bleeding. Internal drugs like Imburai, Adadhodai, vetchi can be given. Anti-microbial drugs like Vembu, Pungu, Manjal, Arugampul, Vallarai, Kuppaimeni can be used.

Analgesics like Amukkara, Oomathai, Jatamanjil, Sivanarvembu can be used. Externally Mathan thylam, Sivanarvembu kuzhi thylam, Pungu thylam, vanga vennai, vanga virana kalimbu can be used.

Skin and mind are related to each other in all aspects. The psychological expression of the mind is reflected through the skin. Likewise skin problems may affect psychological well being. Hence both should be maintained in a proper way. The patients were asked to be free from emotional variance, unwanted thoughts and worries. They were advised to practise pranayamam and some simple exercises.

Apart from these, there are lot of drugs are described in various literatures for ulcers. Among them “**KUKKIL CHOORNAM**” and “**VIRANA SANJEEVI THYLAM**” are taken as trial medicines to prove their efficacy in healing acute and chronic ulcers.

MODERN ASPECT

DEFINITION:

Skin ulcer is a break in the continuity of the covering epithelium, either skin or mucous membrane due to molecular death following sloughing of inflamed tissue. Skin ulcer or chronic wound can result in complete loss of the epidermis and often portions of the dermis and even subcutaneous.

ETIOLOGY:

The main causes of skin ulcers are as follows

- ❖ Trauma
- ❖ Infections like fungal, bacterial and viral infections
- ❖ Vascular disorders
- ❖ Metabolic disorders
- ❖ Immobilisation
- ❖ Nutritional disturbances like vitamin deficiencies
- ❖ Nervous disorders
- ❖ Cancer

CLASSIFICATION:

1. CLINICAL CLASSIFICATION:

Ulcers are classified into three types

(a) Spreading ulcer:

In this type the edge of the ulcer is found to be inflamed and oedematous.

(b) Healing ulcer:

In this type the edge is sloping with the floor containing healthy pink or red granulation tissue and serous discharge in it.

(c) Callous ulcer:

Floor contains pale unhealthy granulation tissue with indurated edge or base. Ulcer has no tendency to heal. It lasts for many months to years.

2. PATHOLOGICAL CLASSIFICATION:

The pathological classification includes the following type of ulcers

Specific ulcers:

1. Tuberculous ulcer
2. Syphilitic ulcer
3. Actinomycosis
4. Meleney's ulcer

Malignant ulcers:

1. Carcinomatous ulcer
2. Rodent ulcer
3. Melanotic ulcer

Non specific ulcers:

1. Traumatic ulcer
2. Arterial ulcer
3. Venous ulcer
4. Neurogenic ulcer
5. Tropical ulcer
6. Diabetic ulcer
7. Ulcers may be associated with certain other diseases like Gout, Anaemia, Avitaminosis, Rheumatoid arthritis, Leukemia, Polycythemia etc.,

Other ulcers:

1. Ulcers due to chilblains and frostbite(Cryopathic ulcer)
2. Martorell's or Hypertensive ulcer
3. Bazin's ulcer

GENERAL SYMPTOMS OF SKIN ULCER

Skin ulcer is found to be in various size and shapes often round with layers of skin erosion. The surrounding skin of the ulcer may be red or pink, swollen and tender at times. Discharge in the ulcer may be bloody, serous or purulent if it is infected.

Ulcers that heal within three months are considered to be acute ulcers and above the period are chronic ulcers. Patients with chronic ulcer suffer from constant pain at night. Symptoms include increasing pain, unhealthy granulation tissue, foul smell and purulent discharge in the ulcer. Symptoms tend to worsen once the ulcer has become infected.

COURSE OF AN ULCER

1. Initiation of an ulcer:

Often the patient or the clinician may identify an initiating event for an ulcer. Eg: Breast abscess, Varicose veins, TAO in Pipe smoking.

2. Extension:

During the stage of extension, the floor is covered with exudates and sloughs while the base is indurated. The discharge is purulent and even blood stained.

3. Progression:

The ulcer may insidiously increase in size (Tuberculous ulcer) or it may rapidly (Malignant ulcer or Inflammatory ulcer) increase.

4. Transition:

This stage prepares for healing. The floor becomes clean, the slough separate, induration of the base diminishes and the discharge becomes more serous. Small reddish areas of granulation tissue appear on the floor.

5. Repair and Healing:

The stage of repair consists of the transformation of the granulation tissue to fibrous tissue, which gradually contracts to form a scar. The epithelium gradually extends from the shelving edge to cover the floor (at a rate of 1mm/day). This healing edge consists of three zones, the outer epithelium which appears white, middle one is blue and the inner red zone is covered by a single layer of epithelial cells.

PROCESS OF ULCER HEALING

The process of healing of an ulcer is intricate in which the skin repairs itself after injury. In normal skin, the epidermis (outermost layer) and dermis (inner or deeper layer) exists in steady-state equilibrium, forming a protective barrier against the external environment. Once the protective barrier is broken, the normal physiologic process of ulcer healing is immediately set in motion.

The phases of ulcer healing are as follows:

- Removal of dead cells
- Proliferation of parenchymal and connective tissue
- Angiogenesis
- Synthesis of collagen
- Tissue remodelling
- Wound contraction

Upon injury to the skin, a set of complex biochemical events takes place in a closely orchestrated cascade to repair the damage. Within the minutes of post-injury, platelets aggregate at the injury site to form a fibrin clot. This clot acts to control active bleeding. In the inflammatory phase, bacteria and debris are phagocytosed and removed. The factors released cause the migration and division of cells involved in the proliferative phase. The proliferative phase is characterized by angiogenesis, collagen deposition, granulation tissue formation, epithelialization and ulcer contraction.

In angiogenesis, new blood vessels are formed by vascular endothelial cells.

In granulation tissue formation, fibroblasts grow and form a new provisional extracellular matrix (ECM) by excreting collagen and fibronectin. Concurrently, re-epithelialization of the epidermis occurs, in which epithelial cells proliferate.

In contraction, the ulcer is made smaller by the action of myofibroblasts, which establish a grip on the ulcer edges and contract themselves.

In the maturation and remodeling phase, collagen is remodeled and realigned and cells that are no longer needed are removed by apoptosis.

However, this process is not only complex but fragile and susceptible to interruption or failure leading to the formation of chronic non-healing ulcers.

FACTORS AFFECTING ULCER HEALING

Age:

Older patients are at higher risk of poor ulcer healing due to the cellular changes in old age. Healing is influenced by the skin elasticity and collagen replacement. Immune system also plays an important role in the process of healing. In old age people immune system declines in its functions making them susceptible to infection. Chronic diseases in older people affects the blood circulation and oxygenation to the ulcer.

Environment:

Environment plays a major role in healing. Unhygienic and polluted atmosphere delays the healing process and it makes the ulcer susceptible to infection.

Dehydration:

This leads to an electrolyte imbalance and impaired cellular function. It is one of the major problem in patients with burns.

Hygiene:

Effective hand washing greatly reduces the risk of transferring pathogenic organisms from one patient to another by direct contact or by contamination of inanimate objects that are shared.

Infection:

Infection delays healing by

- Prolonging the inflammatory phase
- Disrupting the normal clotting mechanisms
- Promoting disordered leukocyte function and ultimately preventing the development of new blood vessels and formation of granulation tissue. So infection is a major factor in the failure of ulcer to heal.

Blood supply:

Ulcers in the face and hands heal well because of an excellent blood supply. Ulcers below the knees over the shin and calf notably in the elderly heal badly because of a relatively poor blood supply.

Rest:

Granulation tissue has a delicate blood supply that is easily damaged by movement and shearing forces.

Nutrition:

- Protein is required for all the phases of ulcer healing, particularly important for collagen synthesis.
- Glucose balance is essential for ulcer healing.
- Iron is required for transport of oxygen.
- Minerals, Zinc, Copper are important for enzyme systems and immune systems. Zinc deficiency contributes to disruption in granulation tissue formation.
- Vitamins A, B complex and C are responsible for supporting epithelialization and collagen formation. It is also important for the inflammatory phase of ulcer healing.
- Carbohydrates and fats provide the energy required for cell function. Fatty acids are essential for ulcer healing.
- Patient should avoid too much of fat, sugar or salt.

Medication:

Anti-inflammatory, cytotoxic, immunosuppressive and anticoagulant drugs all reduce healing rates by interrupting cell division or the clotting process.

TYPES OF ULCER

Traumatic ulcer:

These are often seen after road traffic accidents where there is loss of skin or poor healing of ulcer. Traumatic ulcer can be mechanical, physical and chemical. This ulcer heals quickly unless supervened by infection or ischaemia, which may turn this ulcer to chronicity.

Ischaemic or arterial ulcer:

Complete or partial arterial blockage may lead to tissue necrosis and ulceration. These are seen in patients with peripheral arterial disease. Arterial ulcers are due to peripheral vascular disease (Atherosclerosis is the commonest followed by Buerger's disease and Raynaud's disease) and poor peripheral circulation.

This condition is more often seen in older people. When it occurs secondary to Buerger's disease, younger between 20 to 40 years of age are affected. In this case patches of dry gangrene may be present along with arterial ulcer. Such ulcers tend to occur on the anterior and outer aspects of the leg, dorsum of the foot, on the toes or the heel.

Pain is the main complaint of arterial ulcers. Intermittent claudication and rest pain are seen in this ulcer. Ulcers are found below the medial malleolus. They are punched out with the floor exposing tendons, bone

and joints. Peripheral arterial pulses should always be felt. Pulse of Dorsalis pedis artery is almost always either feeble or absent. Presence of ischaemic changes can be detected in the foot such as pallor, dry skin, loss of hair, fissuring of the nails etc.

Venous ulcers:

Venous ulcers are the most common type of ulcer affecting the lower extremities. These ulcers are seen in patients with chronic venous congestion due to deep vein thrombosis and varicose veins. These ulcers are typically situated on the medial aspect of the lower third of the lower limb. These ulcers are caused by the abnormal venous hypertension in the lower third of the leg. The main pathway of the venous drainage of the ankle skin in the erect posture is via the ankle perforating veins. When the valves of this are damaged there will be local venous hypertension. This condition is aggravated by obstructed deep veins. Venous hypertension around the ankle causes Hemosiderin deposition in the sub-cutaneous plane from lysed red blood cells which leads to Dermatitis, Lipodermatosclerosis, Fibrosis, Anoxia and Ulceration. The presence of large number of perforators which transmit the pressure changes directly into superficial system. This area is called as Gaiter's zone. It can also be on both malleoli.

Ulcer is often large, non-healing tender, recurrent with secondary infection. Vertical group of inguinal lymph nodes are usually enlarged and tender.

Often it leads to scarring, ankylosis, Marjolin's ulcer formation. Slough from the ulcer bed may give way causing venous haemorrhage.

Neurogenic ulcers:

These ulcers have punched-out edge with slough in the floor thus resembling a gummatous ulcer. Bed-sore and perforating ulcers are typical examples of trophic ulcers. These ulcers develop as the result of repeated trauma to the insensitive part of the body. So some neurological disturbances in the form of loss of sensation is the cause behind this ulcer formation. These ulcers are commonly seen on the heel and the ball of the foot when the patient is ambulatory and on the buttock and on the back of the heel when the patient is non-ambulatory. These ulcers start with callosity under which suppuration takes place, the pus comes out and the central hole forms the ulcer which gradually burrows through the muscles and the tendons to the bone resulting in callous ulcer with punched out corny edge. Floor is covered with slough and the base is slightly indurated.

Tropical ulcers:

Tropical ulcer is caused by a variety of micro organisms, including mycobacteria. It is common in tropical climates. There is no single agreed causative organism for tropical ulcer, although early lesions may be colonized or infected by *Bacillus fusiformis* (Vincent's organism), anaerobes and spirochaetes.

The causative organism enters the skin of the feet and legs through abrasions. A bulla develops containing sero-sanguineous material which then ruptures producing dirty slough, destruction of the skin and superficial tissues. Pain is important at this stage with acute lymphadenitis. The bullae burst in two or three days forming ulcers whose edges are undermined and raised. The ulcer refuses to heal for months and even years.

Diabetic ulcers:

Diabetics are prone to foot ulcerations due to both neurologic and vascular complications.

The three factors play to produce diabetic ulcers are as follows

- Diabetic neuropathy
- Ischaemia
- Tissue vulnerable to infection and thus ulcer is formed.

When the ulcer is due to neuropathy a trophic ulcer results. When the ulcer is due to ischaemia, an ischaemic ulcer results. Blood sugar estimation and urine examination should be performed.

Tuberculous ulcers:

Tuberculosis of the skin manifests itself in several clinical forms. It starts as a nodule which breaks down to form an ulcer. Caseous discharge is seen from the cold abscess of bone and joint tuberculosis. The ulcer is seen in the neck, axilla and groin. Most characteristic feature of this ulcer is its edge is reddish blue and undermined. There is pale granulation tissue with scanty sero-sanguineous discharge in the floor and slight induration at the base. Blood examination, Mantoux test, microscopic and guinea pig inoculation test of the discharge, chest x-ray are the investigations to diagnose ulcer.

Syphilitic ulcers:

Syphilitic ulcers are called as Gummatous ulcers which occur in the tertiary stage of Syphilis. These are the result of obliterative endarteritis, necrosis and fibrosis. Ulcers are seen over the subcutaneous bones like tibia, sternum, ulna and skull. The most characteristic feature is punched out indolent edge and wash-leather slough in the floor. No pain and tenderness are found. W.R and Khan tests are positive in these cases.

Leprotic ulcers:

Leprotic ulcers are characterized by spontaneous in nature, painless character, slow healing and quick recurrence of ulcers. Neuropathic and leprous ulcers are the types. Of these types neuropathic ulcers are more common. These ulcers occur in the sole of the foot due to repeated usage of the denervated foot. Leprous ulcer occur in the dorsum of fingers and toes.

Decubitus ulcer:

It is generally seen in patients who are old, immobilized, chronic ill patients. These ulcers occur over a contact area causes cutaneous ischaemia with necrosis of skin and fat and the deeper bone is laid bare. The gangrenous skin eventually separates exposing necrotic substances tissue fat and even bone. These skin ulcers are commonly found where the bones are close to the skin, such as the heels, ankles, hip and back.

Martorell's ulcer (Hypertensive ulcer):

These ulcers are found in old age people and associated with atherosclerosis. A local patch of skin on the back or outer side of the calf suddenly necroses and sloughs away leading a punched out ulcer extending down to the deep fascia. Patient experiences severe pain and it is the most prominent symptom. Peripheral pulses are usually present. It may take months to heal.

Infective ulcers:

Staphylococcus aureus ulcers occur at any age in the form of multiple, red, scabbed sores on the leg or ankle. This ulcer is due to reinfection as a result of unhygienic habits. Anaemia and poor nutritional status are the predisposing factors. If it is not treated properly, the ulcers become chronic and adherent to the bone.

Marjolin's ulcers:

This is a squamous cell carcinoma arising from a long standing benign ulcer. The commonest ulcer to become malignant is a long standing venous ulcer. The edge is raised and everted. The base of the ulcer becomes hard. Biopsy should always be taken to confirm malignancy.

Apart from these ulcers there are various types of ulcers are seen.

COMPLICATIONS OF AN ULCER

1. Septicaemia
2. Gangrene
3. Cellulitis
4. Osteomyelitis
5. Septic arthritis
6. Carcinoma
7. Amputation
8. Amyloidosis

GENERAL EXAMINATION

1. If the ulcer appears to be tuberculous, all the lymph nodes in the body should be examined.
2. If the ulcer seems to be due to ischaemia, the whole body must be examined for the presence of atherosclerosis or its complications anywhere in the body.
3. When the ulcer is a trophic one general examination must be made to know the type of nervous disease present with this condition.

LOCAL EXAMINATION

INSPECTION:

1. Size:

The size of an ulcer is important to know the time which will be required for healing. A bigger ulcer will definitely take a longer time to heal.

2. Shape:

Tuberculous ulcers	-	Oval
Varicose ulcers	-	Vertically oval
Syphilitic ulcers	-	Round
Carcinomatous ulcers	-	Irregular

3. Number:

Varicose, Tuberculous and Syphilitic ulcers may be more than one in number.

4. Location:

An ulcer on medial malleolus of the lower limb which shows varicose veins is obviously a varicose ulcer. Tuberculous ulcer is seen on the neck, axilla or groin. Syphilitic ulcers are seen over subcutaneous bones. Perforating or trophic ulcers are seen on the heel of foot or ball of the foot. Malignant ulcer may occur anywhere in the body.

5. Edge:

Edge is the connecting part of floor of the ulcer to the margin. There are different types of edges are seen. They are as follows

- ❖ Sloping edge is seen in healing ulcer. Its inner part is red due to healthy granulation tissue. Its middle part is white due to fibrous tissue. Its outer part blue is due to epithelial proliferation.
- ❖ Undermined edge is seen in tuberculous ulcer.
- ❖ Punched out edge is seen in granulamatus ulcer and trophic ulcer.
- ❖ Raised and beaded ulcer is seen in rodent ulcer.

- ❖ Everted edge is seen in carcinomatous ulcer due to spill of the proliferating malignant tissues over the normal skin.
- ❖ In spreading ulcer edge is inflamed.
- ❖ In healing ulcer red granulation tissue in the centre, blue zone in the middle due to growing epithelium and white in the outer due to fibrosis of the scar.

6. Floor:

The tissue visible on the surface of the ulcer is called the floor. When floor is covered with red granulation tissue, ulcer seems to be healthy. Pale and smooth granulation tissue on the floor indicates a slowly healing ulcer. Wash leather slough on the floor of an ulcer is pathognomonic of gummatous ulcer. A trophic ulcer penetrates down even to the bone, which forms floor in this case. A black mass at the floor suggests malignant melanoma.

7. Discharge:

Character of the discharge, its amount and smell should be noted. Different types of discharges are as follows,

- ❖ Serous in healing ulcer.
- ❖ Purulent ulcer in infected ulcer.
- ❖ Bloody in malignant ulcer, healing ulcer
- ❖ Sero-sanguinous in tropical ulcer

- ❖ Serous with sulphur granules in Actinomycosis
- ❖ Yellowish in Tuberculous ulcer

8. Surrounding area:

Varicose ulcer	- Eczematous and pigmented
Tuberculous ulcer	- Scar or wrinkled
Acute ulcer	- Red and oedematous
	surrounding area is seen.

PALPATION

1. Tenderness:

An acutely inflamed ulcer is always exquisitely tender. Chronic ulcer such as tuberculous and syphilitic ulcers are slightly tender. Varicose ulcers may or may not be tender. Neoplastic ulcers are never tender.

2. Edge:

Edge is the area between the margin and the floor of the ulcer. In palpation marked induration is the characteristic feature of carcinoma. A certain degree of induration is expected in gummatous or trophic ulcer.

3. Margin:

Margin is the junction between normal epithelium and the ulcer. It may be regular or irregular, rounded or oval in shape.

4. Base:

Base is the one where ulcer rests. It is better felt than seen. Slight induration of the base is expected in any chronic ulcer but marked induration of the base is seen in squamous cell carcinoma.

5. Depth:

Depth of the ulcer should be measured in millimeters. Trophic ulcers may be as deep as to reach even the bone.

6. Bleeding:

Bleeding is the common feature of malignant ulcer.

6. Relation with deeper structures:

Gummatous ulcer is often fixed to the subcutaneous bones. Malignant ulcer will obviously be fixed to the deeper structure by infiltration.

EXAMINATION OF LYMPH NODES

Regional lymph nodes are enlarged in acute ulcer. Lymph nodes are enlarged, matted are slightly tender. Nodes are stony hard in malignant ulcer.

EXAMINATION FOR VARICOSE VEINS

When the ulcer is situated on the lower part of the leg, one should search for varicose veins and examine the condition of the arteries proximal to the ulcer.

EXAMINATION FOR NERVE LESION

Trophic ulcers develop as a result of repeated trauma to an insensitive part of the patient's body. This is mostly seen in the sole. It may lead to ulcer formation. So presence of trophic ulcer indicates some neurological disturbance.

INVESTIGATION

1. Routine examination of the blood

- ❖ Total count
- ❖ WBC
- ❖ Hb
- ❖ ESR
- ❖ Blood sugar
- ❖ Albumin

2. Examination of the urine for sugar estimation

3. Bacterial examination of the discharge of ulcer

4. Skin test:

- ❖ Mantoux test is more important to diagnose tuberculous ulcer.

5. Biopsy:

- ❖ It should be done in case of malignant ulcer. It is generally taken from the edge of the ulcer.

6. Chest X-ray:

- ❖ This is done to exclude any metastatic deposit in lungs.

7. Contrast radiography:

- ❖ Arteriography may be helpful to diagnose arterial or ischaemic ulcer.
Phlebography is helpful to diagnose deep vein thrombosis.

MANAGEMENT OF ULCERS:

Treatment aims to reverse the factors that have caused the ulcer. Venous leg ulcers, in the absence of arterial disease, are usually treated with exercise, elevation at rest and compression. Compression must not be used if there is significant arterial disease, as it will aggravate inadequate blood supply. Surgery, ultrasound guided sclerotherapy or endovascular laser treatment of superficial and perforator leg veins may also help, particularly if the deep venous system is intact.

Debridement:

The removal of surface contamination and dead tissue is known as Debridement. Proper cleaning and skin care is important. Surgical debridement or medical debridement using wet and dry dressings, ointments are used. Maggots and larval therapy are occasionally recommended. Debridement converts the chronic ulcer into an acute ulcer so that it can progress through the normal stages of healing.

Treating Infectious ulcer:

Antibiotics are not necessary unless there is tissue infection. This is likely if the ulcer becomes more painful and/or the surrounding skin becomes red, hot or swollen (cellulitis). Cellulitis may also result in fever and sickness. It should be treated with oral antibiotics. Topical antibiotics are best avoided because their use may result in increased antibiotic resistance and allergy.

Dressings of an ulcer:

There is a whole range of specialized dressings available to assist with the various stages of ulcer healing. These are classified as non-absorbent, absorbent, debriding and self-adhering. Dressings are usually occlusive as ulcers heal better in a moist environment. If the ulcer is clean and dry, occlusive dressings are usually changed weekly; more frequent changes are avoided as dressing changes, remove healthy cells as well as

debris. Contaminated or weeping ulcers may require more frequent dressing changes, sometimes every few hours.

Surgical management of ulcer:

Surgery may be considered if the ulcer fails to heal with conservative measures, particularly if it is very large or painful. First, the state of the venous and arterial systems should be assessed; infection eliminated and underlying associated diseases such as Diabetes, Thrombophilia or malnutrition should be controlled. Chronic ulcers may be treated by various types of skin graft.

ASSESSMENT OF THE PATIENT WITH AN ULCER:

Assessment is the starting point of ulcer treatment and should include the entire patient and not just the ulcer. Note the size, depth, necrotic and granular tissue present. Reassess at least weekly or sooner if deterioration of the ulcer is noted. Monitor the overall medical condition of the patient and watch for other complication like arthritis, Squamous cell carcinoma in the ulcer, Systemic complication of topical treatment.

Nutritional assessment and management:

Perform a nutritional assessment at least every month. Vitamin and mineral supplements may be necessary. Positive nitrogen balance and

protein intake are important as well. Usually ulcers do not heal well with a serum albumin below 3gm percent and Haemoglobin below 10gm percent.

Pain assessment:

The goal is to eliminate the cause of the pain, to provide analgesia, or both. Cover the ulcer, adjust support surface, reposition and give analgesics.

Psychosocial assessment:

The goal is to create an environment conducive to patient adherence to the ulcer treatment plan.

TREATMENT

- ❖ Growth factors and Cytokines
- ❖ Hyperbaric oxygen
- ❖ Skin graft substitutes and flap
- ❖ Connective tissue matrix
- ❖ Expanded epidermis
- ❖ Epidermal stem cells

Compression Therapy

This is important in case of venous leg ulcers and chronic swelling of the lower leg. The external pressure on the leg helps to heal the ulcer by increasing the calf muscle pump action and reduce swelling in the leg.

PREVENTION OF ULCER:

Prevention of ulcer is more important. The following measures can be followed in preventing in leg ulcers,

Venous ulcers and arterial ulcers:

- Walking regularly keep the calf muscle pump to work properly
- Ask to quit smoking
- Ask to lose weight in obese individual
- Avoid sitting with legs crossed
- Look for any colour change in limbs

Diabetic ulcers:

- Check the toes and feet regularly for any sores, cracks.
- Care should be taken in preventing toes from injury
- Avoid exposure to extreme temperature
- Wear comfortable and fitting shoes and socks
- Remove if there is any callus found
- Clean the feet daily before going to bed

MATERIALS AND METHODS

The clinical study on Viranam(Skin ulcer) was carried out in the Post Graduate department of Sirappu Maruthuvam, Government Siddha Medical College, Palayamkottai. In this study twenty five patients were treated as Outpatients and Fifteen patients were treated as Inpatients. After discharge of the Inpatients, all of them were followed as Outpatients in the OP Department.

Selection of the Patients:

For this clinical study, 40 cases were selected from both sexes of varying age groups. All cases were carefully examined before admission and ruled out if there is any other co-existing illness.

Study of Siddha clinical diagnosis:

The author prepared a case sheet on the basis of Siddha diagnostic procedures poriyal aridhal, pulanal aridhal, vinadhal, envagai thervugal and modern methods to diagnosis the disease. The individual case sheet was maintained for each and every patient.

Evaluation of clinical parameters:

During admission the detailed clinical history was taken from the patients. Ulcers present in any parts of the body, with or without symptoms

of pain, swelling, tenderness and discharge were taken as criteria for the Pungal cases. A detailed clinical history was taken by regarding the history of present and past illness, family history, aggravating factors, occupation, socio-economic status, dietary and personal habits and associated history of any other systemic diseases.

Clinical Investigations:

The following modern diagnostic investigations were done in all selected patients in the laboratory of Government Siddha Medical College, Palayamkottai.

Blood tests:

- Total WBC count
- Differential count
- ESR
- HB
- Estimation of sugar
- Estimation of urea
- Estimation of serum cholesterol

Urine:

- Albumin
- Sugar
- Deposits

Pharmacological analysis of the trial drug was carried out in the Department of Pharmacology, Government Siddha Medical College, Palayamkottai.

Treatment:

All the patients were treated with the following medicines.

- Kukkil choornam – 1.5 gm 2 times a day with Honey or Cow's ghee.
- Virana sanjeevi thylam – Required amount of oil is applied externally over the affected areas.

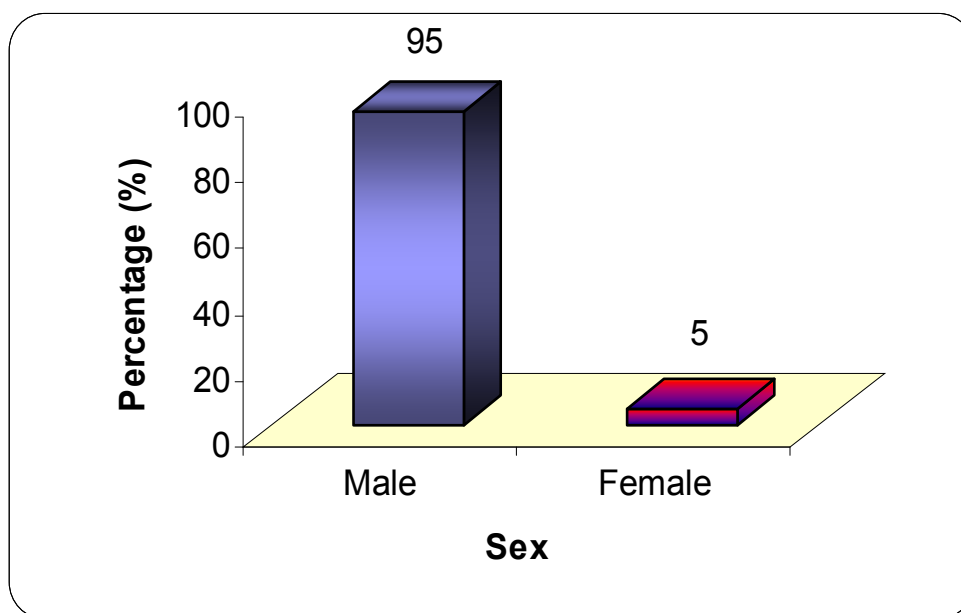
OBSERVATION AND RESULTS

The observation and results were studied and tabulated under the following headings:

1. Sex distribution
2. Age distribution
3. Socio-economic status
4. Occupation
5. Mode of onset
6. Aetiology
7. Duration of illness
8. Clinical features
9. Types of pun(Siddha concept)
10. Types of ulcer(Modern concept)
11. Mukkuttram
12. Udal thathukkal
13. Envagai thervugal
14. Neerkuri neikkuri reference
15. Results after treatment with both Internal and External medicines
16. Results after treatment with External medicine only
17. Overall Results

1. SEX DISTRIBUTION

Sl No	Sex	No of Cases	Percentage
1	Male	38	95
2	Female	2	5

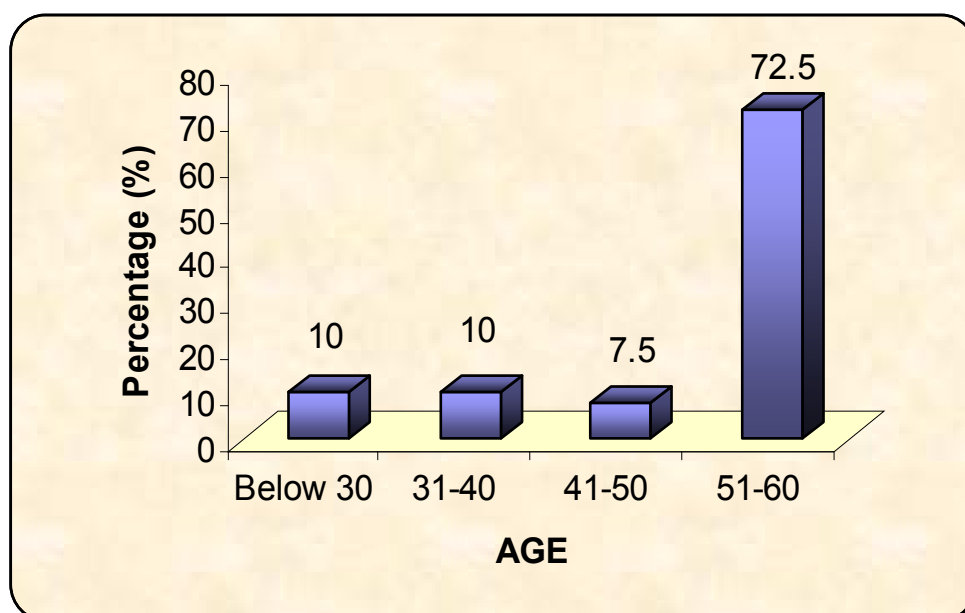


Observation:

Among the 40 patients selected for this study, 95% were males and 5% females.

2. AGE DISTRIBUTION

Sl. No	Age	No of Cases	Percentage
1	Below 30	4	10
2	31-40	4	10
3	41-50	3	7.5
4	51-60	29	72.5

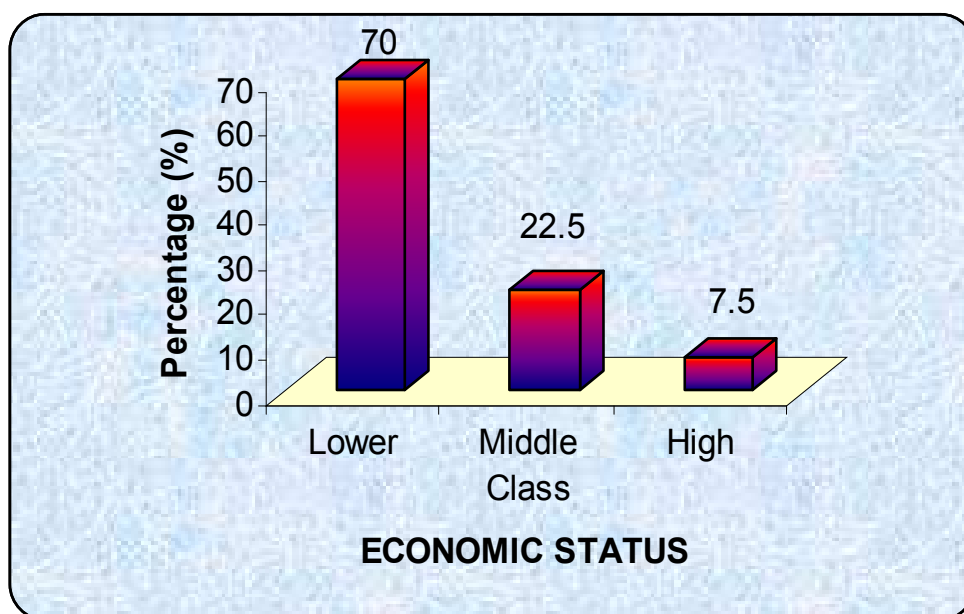


Observation:

The patients selected were from all age groups as given above and the maximum number of patients was in the age between 51 and 60.

3. SOCIO-ECONOMIC STATUS

Sl. No.	Economic Status	No of Cases	Percentage
1	Lower	28	70
2	Middle Class	9	22.5
3	High	3	7.5

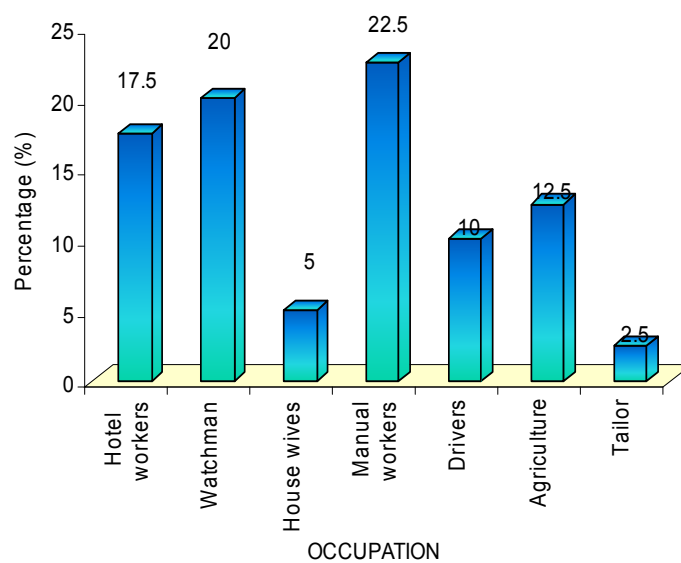


Observation:

22.5% of the patients were from Middle class and 70% of patients were Poor.

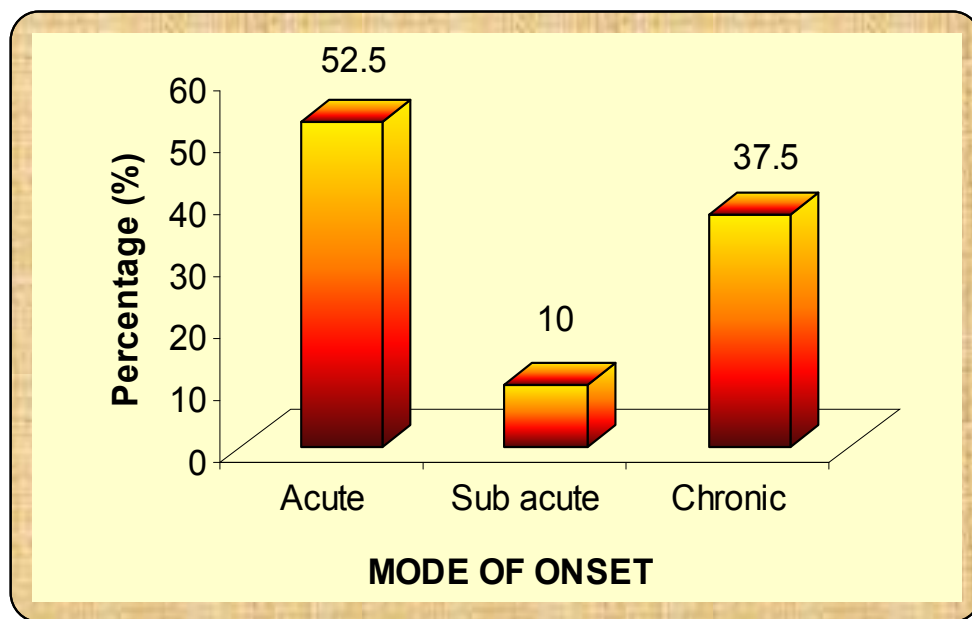
4. OCCUPATION :

S.No.	Occupation	No. of cases	Percentage
1.	Hotel workers	7	17.5
2.	Watchman	8	20
3.	House wives	2	5
4.	Manual workers	13	22.5
5.	Drivers	4	10
6.	Agriculture	5	12.5
7.	Tailor	1	2.5



5. MODE OF ONSET

S.No.	Mode of onset	No. of cases	Percentage
1.	Acute	21	52.5
2.	Sub acute	4	10
3.	Chronic	15	37.5

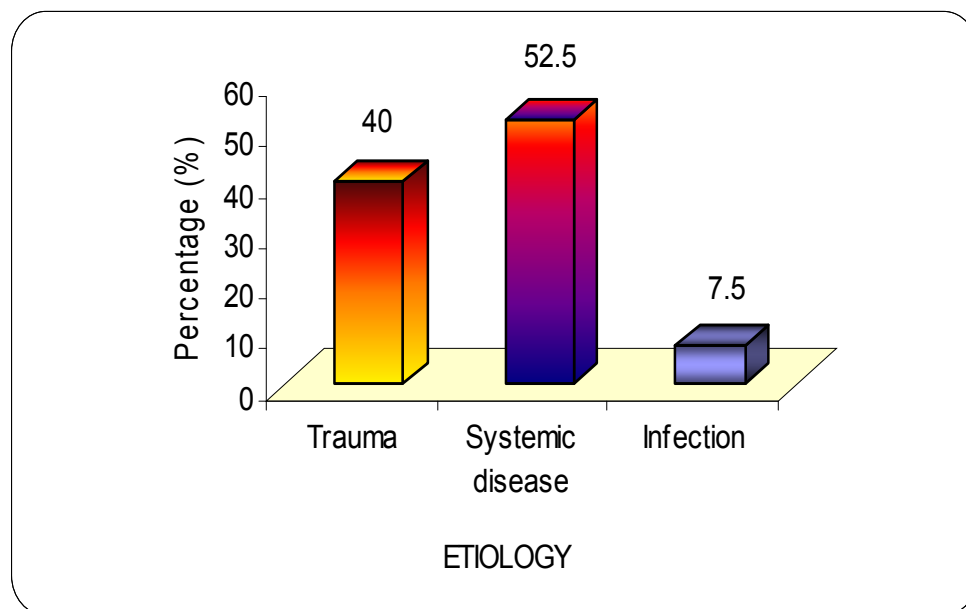


Observation :

Out of 40 cases of clinical trials 37.5% were found chronic sufferers.

6. ETIOLOGY

S.NO	ETIOLOGY	NO. OF CASES	PERCENTAGE
1	Trauma	16	40
2	Systemic disease	21	52.5
4	Infection	3	7.5

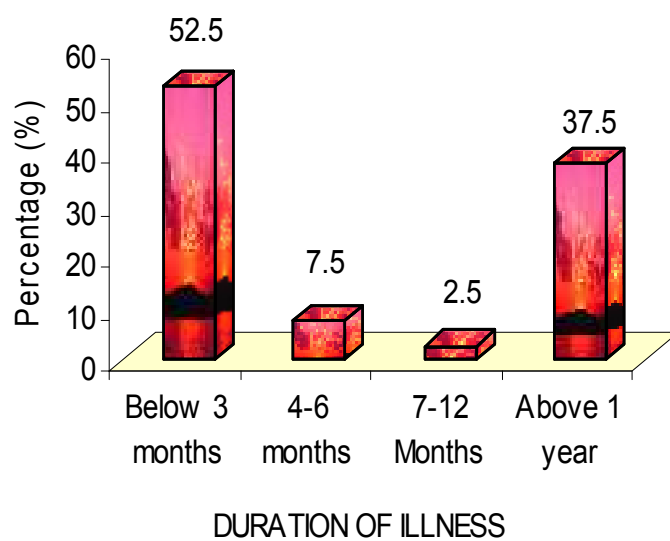


Observation :

Out of 40 cases, 40% of cases had traumatic history 52.5% cases had systemic disease history

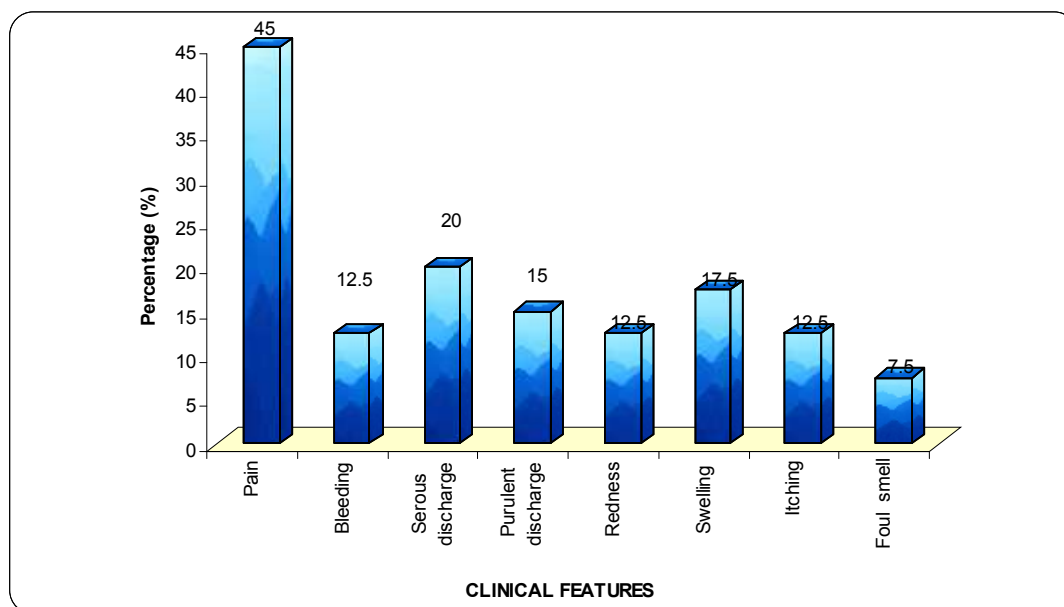
7. DURATION OF ILLNESS

Sl. No	Duration of Illness	No of Cases	Percentage
1	Below 3 months	21	52.5
2	4-6 months	3	7.5
3	7-12 Months	1	2.5
4	Above 1 year	15	37.5



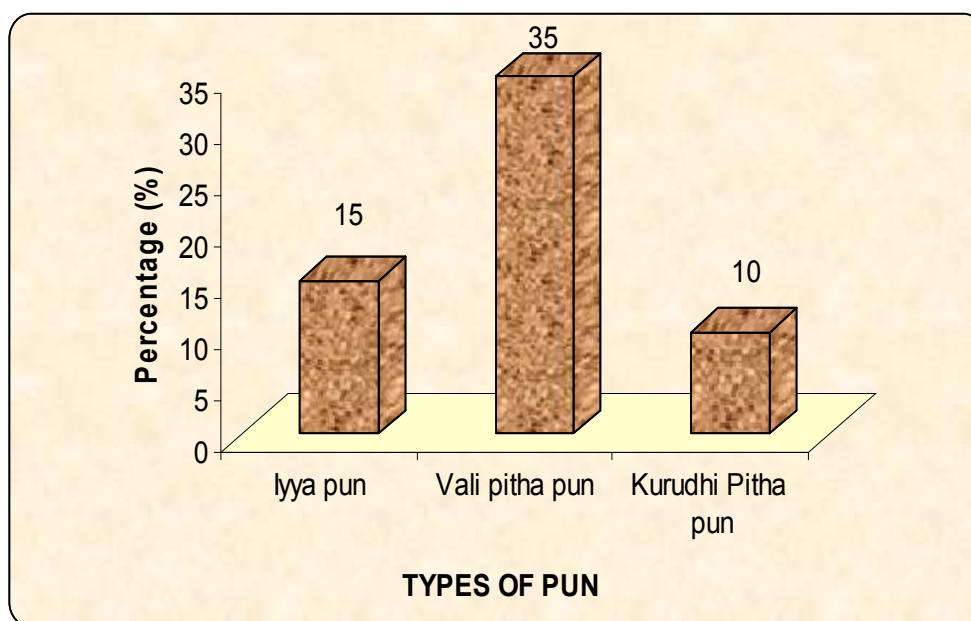
8. CLINICAL FEATURES

Sl. No	Clinical Features	No of Cases	Percentage
1	Pain	18	45
2	Bleeding	5	12.5
3	Serous discharge	8	20
4	Purulent discharge	6	15
5	Redness	5	12.5
6	Swelling	7	17.5
7	Itching	5	12.5
8	Foul smell	3	7.5



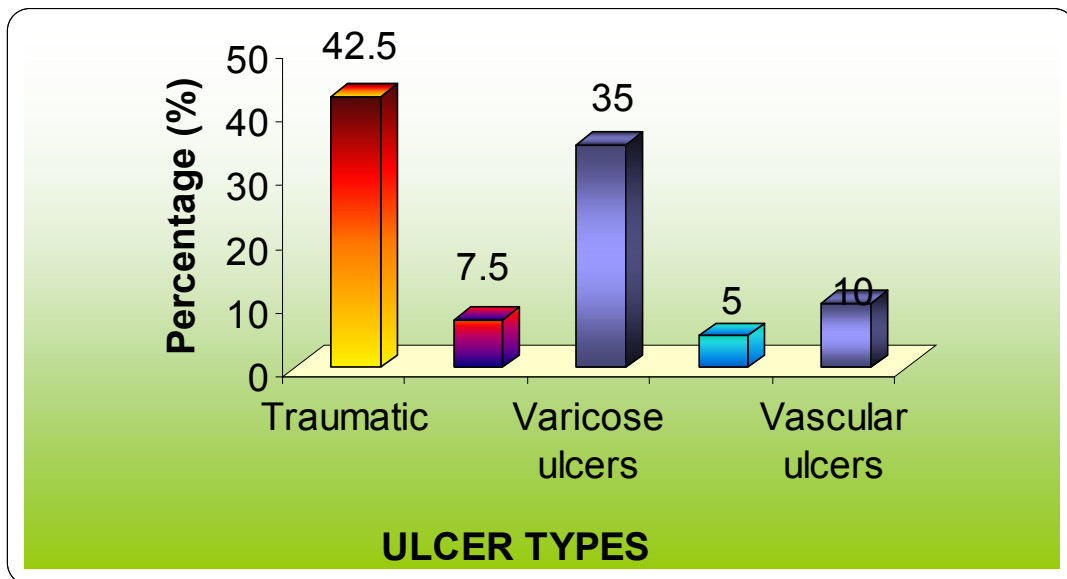
9. TYPES OF PUN (Siddha aspect)

Sl. No	Pun	No of Cases	Percentage
1.	Iyya pun	6	15
2.	Vali pitha pun	14	35
3.	Kurudhi Pitha pun	4	10



10.TYPES OF ULCERS (Modern Aspect)

Sl. No	Ulcer types	No. of Cases	Percentage
1	Traumatic	17	42.5
2	Diabetic	3	7.5
3	Varicose ulcers	14	35
4	Neurogenic	2	5
5	Vascular ulcers	4	10



11.MUKKUTTRAM

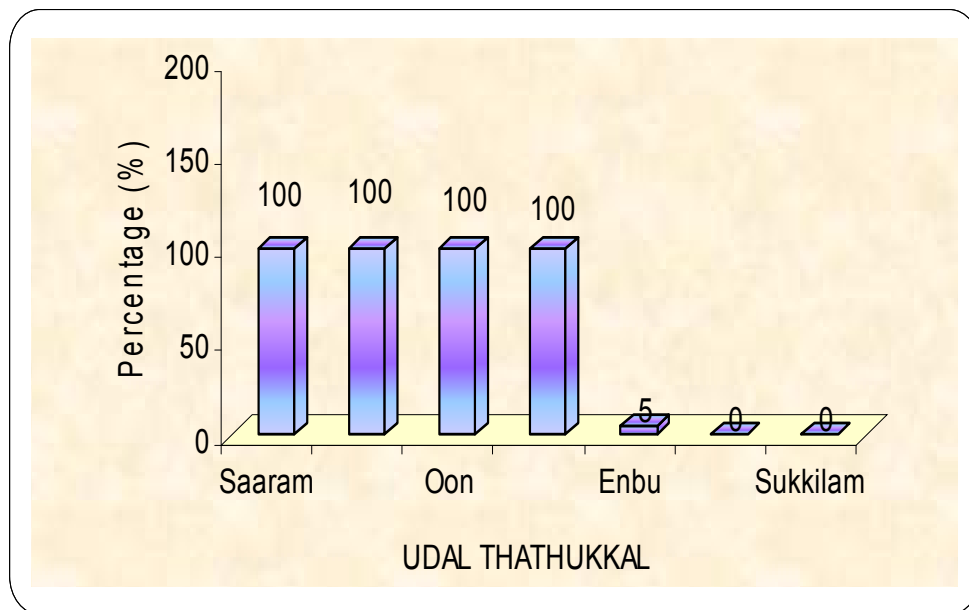
Sl. No	Mukcuttram	No. of Cases	Percentage
1	Vaadham		
	Vyanan, Samanan	35	87.5
	Vyanan, Samanan, Abanan	5	12.5
2	Pitham		
	Prasagam	26	65
	Ranjagam, Prasagam	14	35
3	Kabam		
	Avalambagam	3	7.5

Observation:

In vatham viyanan and samanan are mostly affected and in pitham prasagam is mostly affected .

12. UDAL THATHUKKAL

Sl. No	Udal thathukkal	No. of Cases	Percentage
1	Saaram	40	100
2	Senneer	40	100
3	Oon	40	100
4	Kozhuppu	40	100
5	Enbu	2	5
6	Moolai	-	-
7	Sukkilam	-	-

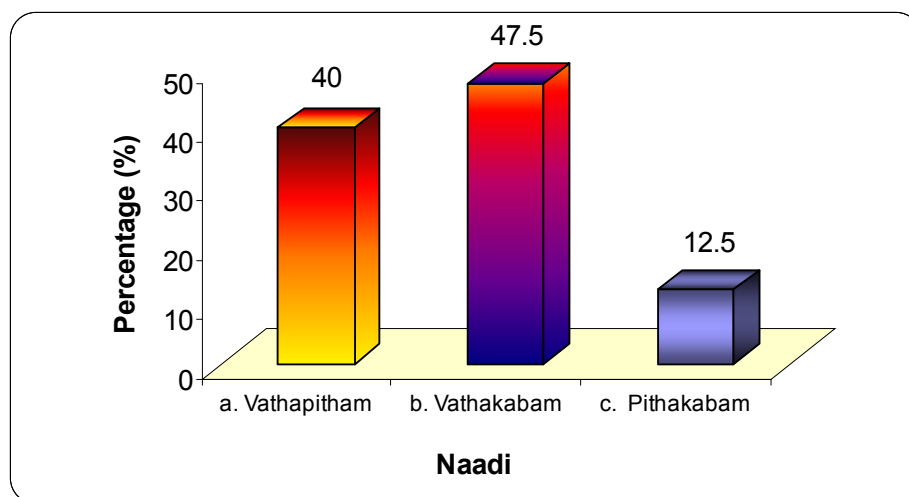


Observation:

Out of 40 patients, Saaram, Senneer, Oon, Kozhuppu were affected in all the cases.

13. EN VAGAI THERVUGAL

Sl. No	En Vagai Thervugal	No. of Cases	Percentage
1	Naa	6	15
2	Niram	40	100
3	Mozhi	-	-
4	Vizhi	-	-
5	Sparisam	40	100
6	Malam	5	12.5
7	Moothiram	-	-
8	Naadi		
	a. Vathapitham	16	40
	b. Vathakabam	19	47.5
	c. Pithakabam	5	12.5

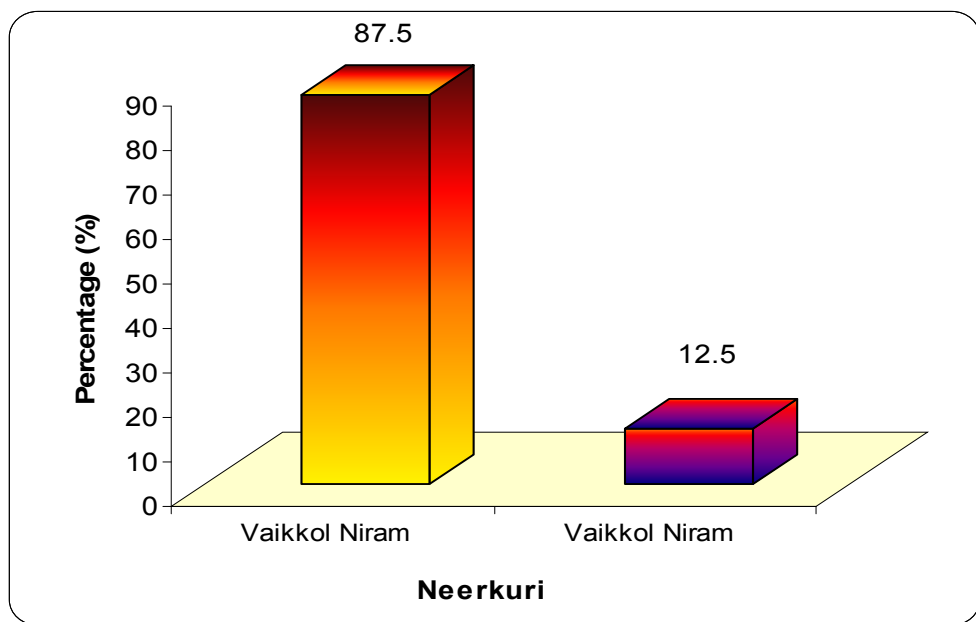


Observation:

In En vagai thervugal, Niram and Sparisam were found affected in all the 40 cases. The Naadi nadai seen in patients were Vathapitham 40 %, Vathakabam 47.5 % and Pithakabam 12.5%.

14. NEERKKURI, NEIKKURI REFERENCE

Sl. No	Type of Test	No. of Cases	Percentage
1	Neerkkuri: Vaikkol Niram	35	87.5
2	Venmai Niram	5	12.5
3	Neikkuri:		
	Spreads like snake	-	-
	Spreads like ring	-	-
	Spreads like pearl	3	7.5
	Snake in ring	19	47.5
	Snake in pearl	12	30
	salladaikkann	6	15



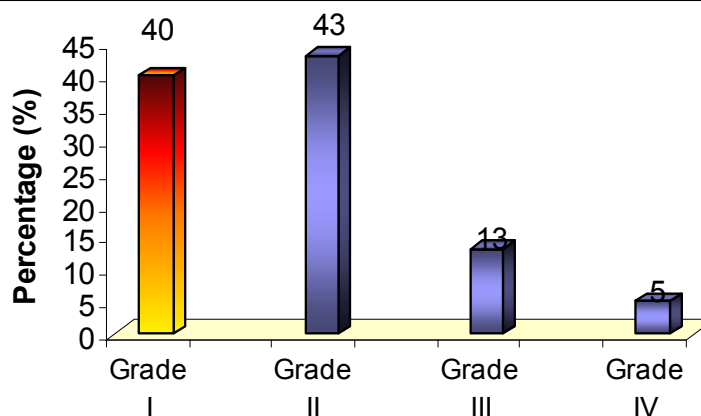
15. RESULTS AFTER TREATMENT

Based on the outcome, all the 40 patients have been classified into 4 grades. The gradation is as follows,

- Grade I (Complete healing with no recurrence for 3 months)
- Grade II (Complete healing with recurrence)
- Grade III (Partial healing)
- Grade IV (No healing)

TREATMENT WITH BOTH INTERNAL AND EXTERNAL MEDICINE

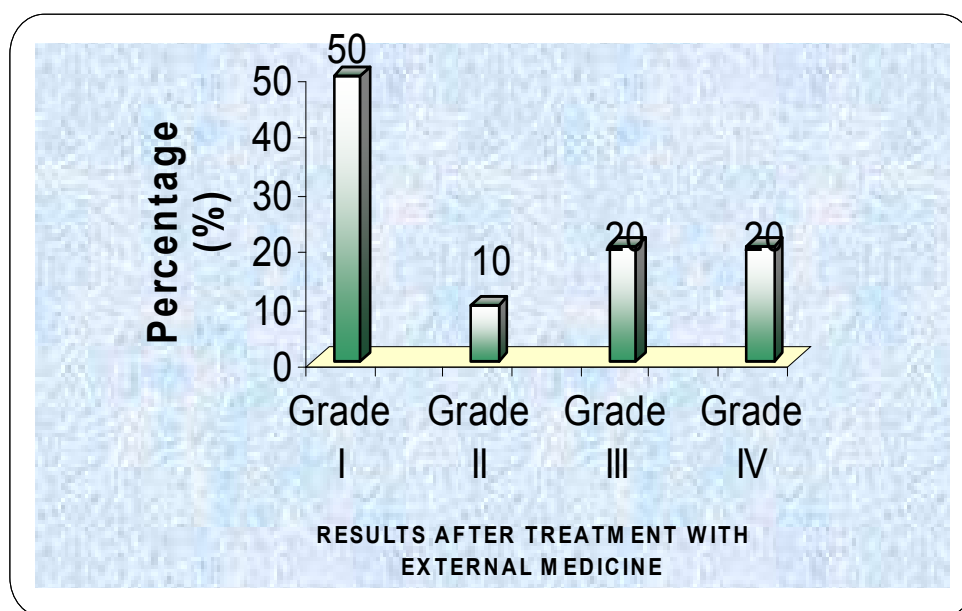
S.No	Results	No. of Cases	Percentage
1.	Grade I	12	40
2.	Grade II	13	43
3.	Grade III	4	13
4.	Grade IV	1	5



**RESULTS AFTER TREATMENT WITH
INTERNAL AND EXTERNAL MEDICINE**

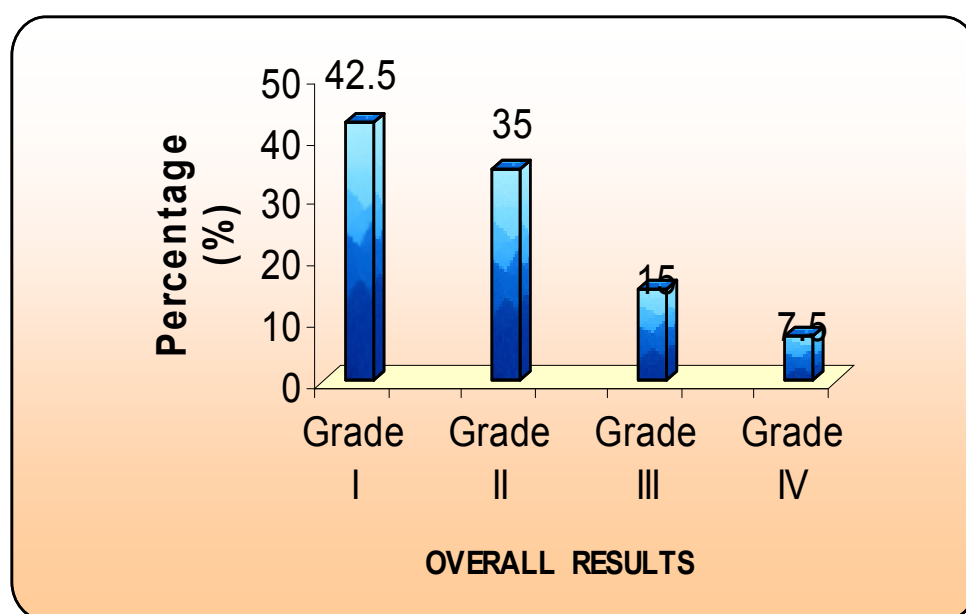
16. RESULTS AFTER TREATMENT WITH EXTERNAL MEDICINE ALONE

S.No	Results	No. of Cases	Percentage
1.	Grade I	5	50
2.	Grade II	1	10
3.	Grade III	2	20
4.	Grade IV	2	20



17.OVERALL RESULTS AFTER TREATMENT

S.No	Results	No. of Cases	Percentage
1.	Grade I	17	42.5
2.	Grade II	14	35
3.	Grade III	6	15
4.	Grade IV	3	7.5



OP AND IP CASES CLINICAL IMPROVEMENT

Sl. No	OP & IP NO	NAME	AGE	SEX	DOA	DOD	TREATED DAYS	RESULT
1	48390	ARUMUGAM	35	M	28.6.12	16.7.12	20	GRADE I
2	62086	PAZHANI	55	M	13.8.12	3.9.12	22	GRADE I
3	49651	PAKIANATHAN	60	M	2.7.12	20.7.12	19	GRADE I
4	58380	SANTHANAM	58	M	1.8.12	21.8.12	13	GRADE I
5	95090	KAADHAR	60	M	22.11.12	10.12.12	20	GRADE II
6	80380	SORNAM	36	F	9.10.12	7.11.12	28	GRADE II
7	70400	SAAMI	52	M	10.9.12	24.9.12	14	GRADE II
8	67117	SUDALAIMUTHU	56	M	30.8.12	27.9.12	28	GRADE I
9	61301	PANDIRAJ	56	M	10.8.12	3.9.12	24	GRADE II
10	71963	MAHESH KUMAR	25	F	14.8.12	4.9.12	21	GRADE I
11	60357	MARIAPPAN	54	M	5.9.12	29.9.12	25	GRADE I
12	63024	DEVASAGAYAM	17	F	16.8.12	3.9.12	18	GRADE II
13	81560	PRADEEPRAJ	22	M	2.10.12	24.10.12	23	GRADE I
14	81411	SAKARANARAYANANI	55	F	12.10.12	5.11.12	25	GRADE II
15	79762	SIVARAMAN	47	F	9.10.12	5.11.12	28	GRADE III
16	75265	GABRIEN	53	M	24.9.12	10.11.12	17	GRADE I
17	79822	SELVAM	54	F	8.10.12	4.11.12	28	GRADE II
18	72872	MURUGESH	45	F	17.9.12	15.10.12	29	GRADE II
19	80008	AMALA	24	M	8.10.12	22.10.12	15	GRADE I
20	92635	MURUGAN	55	F	20.11.12	20.12.12	30	GRADE I

OP AND IP CASES CLINICAL IMPROVEMENT

Sl. No	OP & IP NO	NAME	AGE	SEX	DOA	DOD	TREATED DAYS	RESULT
21	72888	GURUSAMY	50	M	17.9.12	19.10.12	33	GRADE III
22	65954	MADASAMY	60	M	27.8.12	13.9.12	18	GRADE II
23	84465	SYED ALI	37	M	25.10.12	28.11.12	35	GRADE III
24	84876	DAS	33	M	25.10.12	15.11.12	22	GRADE I
25	86448	KANAGARAJ	52	M	30.10.12	17.11.12	18	GRADE I
26	2347	BALAKRISHNAN	60	M	21.7.12	29.8.12	39	GRADE II
27	2682	KARUPPASAMY	52	M	14.8.12	6.9.12	24	GRADE II
28	2773	KAILASAMPILLAI	60	M	22.8.12	26.9.12	36	GRADE IV
29	2863	AYYANAR	53	M	30.8.12	13.9.12	15	GRADE I
30	2963	KAILASAM	60	M	7.9.12	4.10.12	28	GRADE III
31	3049	THANGANADAR	59	M	13.9.12	10.10.12	28	GRADE III
32	3041	SUDALAIYANDI	50	M	13.9.12	5.11.12	23	GRADE I
33	3112	SHANMUGAM	43	M	19.9.12	26.10.12	38	GRADE II
34	2596	SUDALAIMUTHU	56	M	7.8.12	23.8.12	17	GRADE I
35	2299	RAMALINGAM	57	M	17.7.12	1.8.12	16	GRADE II
36	2948	CHELLAYA	59	M	6.9.12	25.9.12	20	GRADE II
37	3802	BALU	52	M	8.11.12	6.12.12	29	GRADE III
38	3241	PACKIARAJ	54	M	26.9.12	15.10.12	19	GRADE I
39	3588	JAYAMANI	60	M	16.10.12	5.11.12	21	GRADE II
40	3214	BALAKRISHNAN	60	M	25.9.12	3.11.12	40	GRADE II

BLOOD INVESTIGATIONS BEFORE AND AFTER TREATMENT- OP & IP PATIENTS

S. NO	OP/IP NO	TC		DC								ESR		Bl.Sugar				Bl.Urea		Se. Cr	
				N		L		E		HB		BT	AT	F		PP		BT	AT	BT	AT
		BT	AT	BT	AT	BT	AT	BT	AT	BT	AT			BT	AT	BT	AT				
1.	48390	8700	9000	58	60	40	40	2	-	12	13	14/30	10/20	86	94	88	120	15	25	0.4	0.6
2.	62086	8100	8500	64	65	33	32	3	-	11.2	12	10/21	5/10	62	70	220	180	25	24	0.3	0.4
3.	49651	8200	8400	59	61	37	38	4	3	12	12	5/11	4/8	72	70	156	150	17	19	0.3	0.4
4.	58380	7100	7800	64	63	30	28	6	2	14	14	7/18	6/12	99	96	172	160	32	25	0.5	0.4
5.	95090	8000	8200	62	64	30	32	8	4	12.6	13	18/40	9/18	109	100	183	171	20	20	0.7	0.5
6.	80380	8400	8600	62	60	35	29	3	1	10.5	11.2	20/45	9/20	71	69	125	136	25	19	0.6	0.5
7.	70400	7600	8800	58	58	40	38	2	4	11	12	10/20	5/10	86	96	83	99	21	43	0.7	0.8
8.	67117	9100	9700	58	62	39	41	3	2	12	11.5	3/7	2/4	95	101	183	167	36	25	0.6	0.7
9.	61301	7800	8900	68	70	27	30	5	1	13	11	5/9	3/5	73	82	195	178	29	30	0.7	0.5
10.	71963	8300	9100	60	74	39	43	6	2	12	12.5	8/10	3/7	87	95	88	96	18	20	0.3	0.4
11.	60357	7500	8400	55	62	37	36	3	2	13	12	7/18	5/13	82	110	86	115	32	25	0.8	0.9
12.	63024	8900	9700	69	75	34	35	1	2	11.5	10.5	5/7	3/5	99	102	156	149	31	30	0.5	0.6
13.	81560	8400	8800	60	60	38	29	2	-	14	14	2/5	2/4	81	75	88	85	19	25	0.8	0.7
14.	81411	7900	8000	53	52	43	41	4	3	12	12	10/18	5/10	77	80	86	112	21	24	0.5	0.6
15.	79762	7600	7800	59	58	39	38	6	7	10.5	11	6/12	4/8	92	90	105	115	31	27	0.3	0.7
16.	75265	9000	9200	58	61	35	32	7	2	9.5	10	10/20	4/8	72	70	95	110	40	29	0.6	0.5
17.	79822	8500	8700	68	70	40	38	1	-	13	12	8/12	2/4	68	82	140	152	28	25	0.3	0.5
18.	72872	7900	8400	63	59	35	37	3	4	12.5	12	22/40	11/20	65	73	160	158	18	20	0.5	0.3
19.	80008	7900	8500	63	61	25	24	2	1	11	10.3	4/8	4/8	79	85	150	145	32	35	0.7	0.8

BLOOD INVESTIGATIONS BEFORE AND AFTER TREATMENT- OP & IP PATIENTS

20.	92635	8100	8600	59	62	30	25	1	-	12	12.5	5/10	4/8	85	80	162	168	24	23	0.5	0.6
S. NO	IP. NO	TC		DC								ESR		Bl. Sugar				Bl. Urea		Se. Cr	
				N		L		E		HB		BT	AT	F		PP		BT	AT	BT	AT
		BT	AT	BT	AT	BT	AT	BT	AT	BT	AT			BT	AT	BT	AT				
21.	72888	7500	7800	54	58	29	31	-	-	13	13	5/8	4/8	83	86	145	153	27	29	0.4	0.5
22.	65954	8300	8900	60	60	27	29	3	1	10.5	11.5	2/4	3/5	96	101	132	139	31	30	0.5	0.6
23.	84465	8200	8300	56	52	31	33	5	2	13	13.5	4/8	4/8	80	93	177	181	35	39	0.2	0.4
24.	84876	8500	8400	62	63	32	35	6	3	12	10.5	18/40	11/20	100	98	166	159	29	30	0.7	0.5
25.	86448	8700	8500	55	59	33	30	2	1	13	12	5/10	2/4	77	83	154	149	23	25	0.5	0.6
26.	2347	6800	8200	67	68	30	30	3	2	11.5	12	60/100	10/20	85	92	150	124	24	28	0.4	0.3
27.	2682	7100	7900	66	68	30	32	4	2	14.2	14	13/27	7/15	108	111	181	174	30	32	0.6	0.8
28.	2773	8000	8400	67	58	30	29	3	1	11	11.5	80/120	21/40	122	107	173	154	29	30	0.5	0.6
29.	2863	8600	8500	60	60	38	35	2	-	9.8	10.5	23/50	9/18	101	98	161	160	45	42	0.6	0.5
30.	2963	8700	8800	61	59	30	29	5	2	10	9.8	20/40	5/10	80	85	96	101	24	26	0.3	0.3
31.	3049	8400	8600	60	60	31	32	5	4	11.8	12	22/40	8/16	96	105	132	139	25	27	0.5	0.5
32.	3041	9500	9700	70	65	28	29	2	1	8.5	9	4/9	3/5	86	88	100	115	32	36	0.2	0.4
33.	3112	9200	9100	62	58	24	23	1	-	12	11.5	2/4	2/4	80	92	136	144	30	31	0.3	0.6
34.	2596	8500	8300	60	62	32	33	7	3	10	10.6	3/6	2/4	82	88	123	150	40	36	0.6	0.5
35.	2299	7700	7800	59	57	30	29	2	1	12	12.3	4/8	4/8	77	101	154	160	28	29	0.5	0.4
36.	2948	7900	8100	63	61	32	29	1	-	10.8	11	7/12	4/8	84	96	147	153	32	30	0.4	0.4
37.	3802	7500	7300	55	54	26	27	3	2	10.8	11.2	5/10	4/9	98	100	156	148	33	32	0.4	0.5
38.	3241	7500	8000	64	63	28	27	4	2	11.6	11	5/10	4/8	87	85	139	154	20	23	0.3	0.4
39.	3588	8200	8700	59	62	27	26	2	1	11.5	12	4/8	4/8	86	89	152	144	29	31	0.6	0.5
40.	3214	8500	8100	61	60	25	24	1	1	12.1	11.9	2/4	2/5	101	100	145	151	32	30	0.5	0.5

URINE AND MOTIONS EXAMINATION BEFORE AND AFTER TREATMENT – OP & IP PATIENTS0.

S. NO	IP NO	URINE								MOTION					
		Before Treatment				After Treatment				Before Treatment			After Treatment		
		Albumin	Sugar	Deposits		Albumin	Sugar	Deposits		Ova	Cyst	Occult blood	Ova	Cyst	Occult blood
				Pus Cells	Epi. cells			Pus cells	Epi. cells						
1.	48390	NIL	NIL	1-2	1-2	NIL	NIL	1-2	0-1	NIL	NIL	NIL	NIL	NIL	NIL
2.	62086	NIL	++	1-2	2-4	NIL	+	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
3.	49651	NIL	NIL	0-1	2-3	NIL	NIL	NIL	1-2	NIL	NIL	NIL	NIL	NIL	NIL
4.	58380	NIL	NIL	2-4	1-2	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
5.	95090	NIL	++	1-3	1-2	NIL	+	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
6.	80380	NIL	NIL	NIL	0-1	NIL	NIL	0-4	NIL	NIL	NIL	NIL	NIL	NIL	NIL
7.	70400	NIL	NIL	2-4	1-2	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
8.	67117	NIL	NIL	1-2	2-4	NIL	NIL	0-1	0-2	NIL	NIL	NIL	NIL	NIL	NIL
9.	61301	NIL	NIL	2-4	2-3	NIL	NIL	1-2	1-5	NIL	NIL	NIL	NIL	NIL	NIL
10.	71963	NIL	NIL	4-5	4-5	NIL	NIL	1-3	4-5	NIL	NIL	NIL	NIL	NIL	NIL
11.	60357	NIL	NIL	1-2	1-2	NIL	NIL	0-1	0-1	NIL	NIL	NIL	NIL	NIL	NIL
12.	63024	NIL	NIL	1-2	2-4	NIL	NIL	1-2	0-1	NIL	NIL	NIL	NIL	NIL	NIL
13.	81560	NIL	NIL	3-5	1-2	NIL	NIL	2-3	0-1	NIL	NIL	NIL	NIL	NIL	NIL
14.	81411	NIL	NIL	1-2	1-2	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
15.	79762	NIL	NIL	1-2	0-1	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
16.	75265	NIL	NIL	2-4	2-4	NIL	NIL	0-1	1-2	NIL	NIL	NIL	NIL	NIL	NIL
17.	79822	NIL	NIL	1-2	0-1	NIL	NIL	1-2	NIL	NIL	NIL	NIL	NIL	NIL	NIL
18.	72872	NIL	NIL	2-3	2-4	NIL	NIL	1-2	1-3	NIL	NIL	NIL	NIL	NIL	NIL
19.	80008	NIL	NIL	1-2	1-2	NIL	NIL	1-2	0-1	NIL	NIL	NIL	NIL	NIL	NIL
20.	92635	NIL	NIL	2-3	2-4	NIL	NIL	2-4	1-2	NIL	NIL	NIL	NIL	NIL	NIL

URINE AND MOTIONS EXAMINATION BEFORE AND AFTER TREATMENT – OP & IP PATIENTS

S. NO	OP NO	URINE								MOTION					
		Before Treatment				After Treatment				Before Treatment			After Treatment		
		Albumin	Sugar	Deposits		Albumin	Sugar	Deposits		Ova	Cyst	Occult blood	Ova	Cyst	Occult blood
				Pus Cells	Epi. cells			Pus cells	Epi. cells						
21.	72888	NIL	NIL	4-6	1-2	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
22.	65954	NIL	NIL	2-3	3-5	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
23.	84465	NIL	NIL	1-2	1-2	NIL	NIL	2-4	0-1	NIL	NIL	NIL	NIL	NIL	NIL
24.	84876	NIL	NIL	1-2	1-2	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
25.	86448	NIL	NIL	2-4	2-4	NIL	NIL	2-4	1-2	NIL	NIL	NIL	NIL	NIL	NIL
26.	2347	NIL	NIL	1-2	1-2	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
27.	2682	NIL	NIL	2-3	1-2	NIL	NIL	1-2	2-4	NIL	NIL	NIL	NIL	NIL	NIL
28.	2773	NIL	NIL	3-5	1-2	NIL	NIL	1-2	0-1	NIL	NIL	NIL	NIL	NIL	NIL
29.	2863	NIL	NIL	2-4	1-4	NIL	NIL	1-2	2-4	NIL	NIL	NIL	NIL	NIL	NIL
30.	2963	NIL	NIL	2-4	2-4	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
31.	3049	NIL	NIL	1-2	1-2	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
32.	3041	NIL	NIL	1-2	1-2	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
33.	3112	NIL	NIL	NIL	NIL	NIL	NIL	2-3	1-2	NIL	NIL	NIL	NIL	NIL	NIL
34.	2596	NIL	NIL	1-2	0-1	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
35.	2299	NIL	NIL	2-3	2-4	NIL	NIL	1-2	0-1	NIL	NIL	NIL	NIL	NIL	NIL
36.	2948	NIL	NIL	1-2	1-2	NIL	NIL	1-2	2-3	NIL	NIL	NIL	NIL	NIL	NIL
37.	3802	NIL	NIL	3-5	1-2	NIL	NIL	1-2	1-2	NIL	NIL	NIL	NIL	NIL	NIL
38.	3241	NIL	NIL	2-4	1-2	NIL	NIL	1-2	2-3	NIL	NIL	NIL	NIL	NIL	NIL
39.	3588	NIL	NIL	1-2	2-3	NIL	NIL	2-4	2-4	NIL	NIL	NIL	NIL	NIL	NIL
40.	3214	NIL	NIL	2-4	2-3	NIL	NIL	1-2	1-4	NIL	NIL	NIL	NIL	NIL	NIL

Name : Karuppasamy

I.P.No: 2682 Age / Sex : 52 /M

BEFORE TREATMENT



AFTER TREATMENT



Name : Sudalaimuthu

I.P.No : 2596 Age / Sex : 56 /M

BEFORE TREATMENT



AFTER TREATMENT



Name : Balakrishnan

I.P.No : 2347 Age / Sex : 60 /M

BEFORE TREATMENT



AFTER TREATMENT



Name : Sornam

I.P.No : 80380 Age / Sex : 36 /F

BEFORE TREATMENT



AFTER TREATMENT



ALOEVERA GEL DRESSING



DISCUSSION

The clinical features of VIRANAM described in Siddha system can be compared with SKIN ULCERS in modern medicine. Forty patients were selected and the diagnosis was made with the help of Siddha diagnostic tools along with modern parameters and all of them were treated with the trial drugs. The observations are discussed under the following topics.

SEX DISTRIBUTION

Male sex was predominantly affected about 95%. Female sex was affected about 5%. Males are vulnerable to ulcers when compared to female victims because of their environmental exposure.

AGE DISTRIBUTION

The prevalence of Viranam was common in the age group mainly above 50 years due to their immunological variance.

SOCIOECONOMIC STATUS

Out of 40 patients, 70% belonged to poor socio economic status which reveals their poor health status.

MODE OF ONSET

Out of 40 patients, 52.5% were acute ulcers and 37.5% were chronic ulcers.

ETIOLOGY

Out of 40 cases, 40% of ulcers were due to trauma and 52.5% due to systemic illness.

DURATION OF ILLNESS

Out of 40 patients, 37.5% were found to have ulcers for more than a year.

CLINICAL FEATURES

Most of the patients were suffered from pain, discharge, itching, foul smell in the ulcers.

TYPES OF ULCER(SIDDHA CONCEPT)

Out of 40 cases, Iyya pun were 15%, vali pitha pun 35% and kurudhi pitha pun 10%.

TYPES OF ULCER(MODERN CONCEPT)

Out of 40 cases, 42.5% ulcers were traumatic, 35% were varicose, 7.5% were diabetic ulcers.

OCCUPATION

Out of 40 cases, 32.5% were manual workers.20% were watchman and 17.5% were hotel and tea-stall workers.

MUKKUTTRAM:

Out of 40 cases, Vyanan, Samanan affected in 87.5% and Vyanan, Samanan and Abanan affected in 12.5% cases.

Out of 40 cases, Prasagam affected in 65% and both Ranjagam and Prasagam affected in 35%.

Out of 40 cases, Avalambagam affected in 7.5% cases.

UDAL THATHUKKAL:

Among the sevan udal thathukkal Saaram, Senneer, Oon, Kozhuppu were affected in all the cases.

ENN VAGAI THERVUGAL:

Niram and Sparisam (changes in skin) were affected in all 40 cases.

Vadha kabam and Vadha pitham naadi had the higher incidence in most of the cases.

NEERKURI AND NEIKKURI:

In Neerkuri, 87.5% of patients had vaikkol niram and 12.5% had venmai niram.

In Neikkuri, majority of the cases had thontha neikkuri, 15% of cases had salladai kann, 7.5% had pearl appearance.

INVESTIGATION:

Along with Siddha diagnostic procedures, modern parameters were also used. Routine examination of blood, urine and other investigation procedures were carried out.

TREATMENT

All the patients were treated with

- Kukkil choornam – 1.5 gm 2 times a day with Honey or Cow's ghee
- Virana sanjeevi thylam – Required amount of oil is applied over the affected areas.

The trial drugs were administered to the patients from the time of admission and continued till the symptoms get reduced. The treatments aimed at providing relief from symptoms.

Diet restrictions and personal hygiene were instructed during the course of the treatment.

During discharge the patient was advised to follow the above said instruction and to have periodic check-up.

RESULTS AFTER TREATMENT

Based on the outcome all the 40 patients have been classified into 4 grades.

Treatment with both Internal and External medicines

- **Grade I** (Complete healing with no recurrence for 3 months) – 40%
- **Grade II** (Complete healing with recurrence) – 43%
- **Grade III** (Partial healing) – 13%
- **Grade IV** (No healing) – 4%

Treatment with External medicine alone

- **Grade I** (Complete healing with no recurrence for 3 months) – 50%
- **Grade II** (Complete healing with recurrence) – 10%
- **Grade III** (Partial healing) – 20%
- **Grade IV** (No healing) – 20%

OVERALL RESULTS

- **Grade I** (Complete healing with no recurrence for 3 months) – 42.5%
- **Grade II** (Complete healing with recurrence) – 35%
- **Grade III** (Partial healing) – 15%
- **Grade IV** (No healing) – 7.5%

SUMMARY

Viranam is compared with the skin ulcers of modern science with reference to its definition, aetiology, classification, pathogenesis, diagnosis and treatment.

Forty patients were selected from different age and sexes from Post Graduate department of Sirappu Maruthuvam for study purposes. Among them 25 cases were treated as Out patients and 15 cases were treated as In patients.

- Detail history of the patients was collected from them before starting the treatment.
- Various Siddha diagnostic tools like uyir thathukkal, udal thathukkal and enn vagai thervugal were used and the data obtained from the methods were recorded in the proforma.
- The diagnosis was endorsed by modern techniques.
- The trial drugs are KUKKIL CHOORNAM as Internal medicine and VIRANA SANJEEVI THYLAM as External medicine.
- Along with medication, the patients were advised over their dietary habits and personal hygiene.
- The efficacy of the drugs was studied by pharmacological analysis and Biochemical analysis. The pharmacological studies revealed

that the trial drugs had significant wound healing effect and anti-inflammatory action.

- Daily progress of all the patients was noted.
- No side effects were reported during and after the course of the treatment.
- The observations made during the clinical study shows that the drugs Kukkil choornam and Virana sanjeevi thylam were clinically effective.

CONCLUSION

People from all over the world are looking today for safer and effective traditional treatment for diseased conditions with minimum negative offshoots. With the foundation laid by our siddhars simple and chronic ulcers are treated with Internal medicine “**KUKKIL CHOORNAM**” and External medicine “**VIRANA SANJEEVI THYLAM**”.

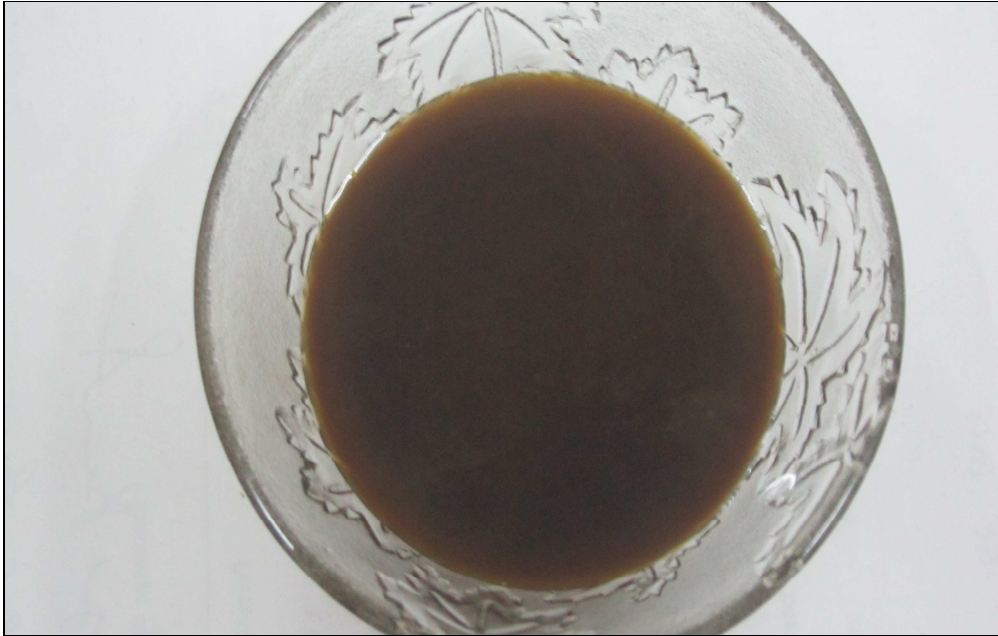
Results shows 42.5% of patients had complete healing effect with no recurrence of Viranam, 35% had recurrence of Viranam and only 7.5% had no healing effect.

Treating skin ulcers with the above said medicines are found to be efficient in healing ulcers without any side effects and improved the general health of the patients.

குக்கில் சூரணம்



விரண சஞ்சீவி தைலம்



KUKKIL CHOORANAM - INTERNAL MEDICINE



சிற்றரத்தை



குக்கில்



சீரகம்



கந்தகம்



குரோசாணி ஓமம்



சாதிபத்திரி



ஜாதிக்காய்



நெல்லி முள்ளி

KUKKIL CHOORANAM - INTERNAL MEDICINE



திப்பிலி



மிளகு



பறங்கிப்பட்டை



தான்றித்தோல்

VIRANA SANJEEVI THYLAM – EXTERNAL MEDICINE



சேராங்கொட்டை



தாளகம்



நல்லெண்ணெய்

ANNEXURE- I

STANDARD OPERATING PROCEDURE FOR PREPARATION OF

KUKKIL CHOORNAM(Internal) AND VIRANA SANJEEVI

THYLAM(External)

KUKKIL CHOORNAM – INTERNAL MEDICINE

Ref:Agathiyar erandayiram

குக்கில் குரணம்

“இடுகின்ற குக்கில் பலம்ரெண்டு சுத்தியா

யிதனுடன் பறங்கிப்பட்டைபலம் நாலு

முடுகின்ற கெந்தகஞ் சுத்திசெய் தரைப்பல

மிளகு சுக்குத்திப்பிலி யோமம் குரோசாணி

தடுகின்ற சாதிக்காய் சாதிபத்திரி யரத்தைத்

தானிகடு நெல்லியோடு நற்சீரகமதாக

அடுகின்ற பலங்களவை கொண்டு தூளாயாவின்

நெய்தேனிற கொள் குலை கிரந்திப்புண் மேகமதுபோமே

- அகத்தியர் இரண்டாயிரம்

KUKKIL CHOORNAM:

INGREDIENTS:

Purified Kukkil(Commiphora mukul)	-	140 gm
Purified Parangipattai(Smilax china)	-	140 gm
Purified Gandhagam(Sulphur)	-	140 gm
Milagu(Piper nigrum)	-	70 gm

Kurosaniomam(<i>Hyocyamus niger</i>)	-	70 gm
Jadhikkai(<i>Myristica fragrans</i>)	-	70 gm
Sittrarathai(<i>Alpinia officinarum</i>)	-	70 gm
Nellimulli(<i>Phyllanthus emblica</i>)	-	70 gm
Thippili(<i>Piper longum</i>)	-	70 gm
Jadhipathiri(<i>Myristica fragrans</i>)	-	70 gm
Thandrithol(<i>Terminalia bellerica</i>)	-	70 gm
Seeragam(<i>Cuminum cyminum</i>)	-	70 gm

PURIFICATION OF DRUGS

KUKKIL

Fermented with neembark decoction for three days and washed with cool water. Same procedure is repeated with a mixture of buttermilk, vinegar and lime juice. Then it is boiled with milk and fried with ghee.

PARANGIPATTAI

Steamed with milk.

GANDHAGAM

It is melted along with cow's butter and poured into cow's milk for thirty times.

Other drugs are cleaned, fried slightly and taken.

METHOD OF PREPARATION

The ingredients are fried,powdered,filtered in a cloth(vasthrakayam) and taken.

Dose : 1.5 gms

Adjuvant : Honey/Ghee

Indication : Megam, Soolai, Pun, Kiranthi

VIRANA SANJEEVI THYLAM – EXTERNAL MEDICINE

Ref: Theran thaila varkka churukkam

விரண சஞ்சீவி தைலம்

காற்புத்தி யோரை நீயோர் காசென மதித்துக் கிட்டாக்

கனிக்கொட்டை யரிபி றப்பைக் கண்டரை நறுக்குச்சேரு

நூற்புத்தி யொடுவாற் கிண்ண நூவுநெய்த்தொடிப திற்றுண்

ணோற்றெரி கழுநீர்ப்புண் ணுண்மையாய்ச் சாய்த்துக்காய்

மேற்புத்தி என்கொலங்க விரணங்கண் முழுதுந்தீர்த்த

வேதியர் தமையுள் ளாத விலங்கின யினமு நோயி

னாற்புத்தி ராதியோடே நாளுக்கு நாட்டேய் வற்று

நம்புரத் தேகு வார்போ னாட்டைவிட் டேகு மாதோ.

- தேரன் தைல வர்க்கச் சுருக்கம்

மகிமை:

“மாதவத்தா லித்தைல மமையி னகெ
வல்லியிற் றோய்த் துருந்துசந்நி வருக்கத்தீரு
மோதகமிட் டலிபுரா தன்த்தொன் றேனு
மூரிமங் கல்லியத்தான் மோட்டைத் தூர்த்து
மீதிறகா லுதயமப்பி யாமப் பின்னர்
மென்கலிகை யரைப்பிட்டு வெச்சு நீராட்
பேதமிலை யெழுதிவச மிவ்வண் ணஞ்செய்
யிதவிரண சஞ்சீவி யிதயத் துன்னே.

-தேரர் தைலவர்க்கச் சுருக்கம்

VIRANA SANJEEVI THYLAM

INGREDIENTS:

Purified serangottai(Semecarpus anacardium)	-	20
Purified Thalagam(Arsenic Trisulphide)	-	25 gm
NalEnnai(Gingelly oil)	-	700 gm

PURIFICATION OF DRUGS

SERANGOTTAI :

Beak of the fruits are removed and soaked in cow dung water.It is then burnt along with the cow dung water.

THALAGAM:

Drug is placed in a cloth and tied slightly. A pot full of cow's urine and lime stone is mixed and placed under fire. The cloth is allowed to lie above the base of the vessel. It continues till the content gets dried. It is then washed and taken.

METHOD OF PREPARATION :

Pour gingelly oil in a vessel. Sprinkle powdered thalagam into the vessel. Cut each serangottai into two pieces and put into the oil. Apply heat gently until the extract gets mixed with the oil. Then pour the oil into the mixture of equal amount of rice water and water. Keep the vessel without any disturbance. Next day collect the oil floating on the surface and apply heat. Filter the oil and it is ready for use.

Indication : Viranam

VENGAARA NEER (For External wash)

Ingredients:

Vengaaram(Borax) - Required amount

Water - Required amount

Purification:

Vengaaaram is powdered and fried.

Preparation:

Purified vengaaaram is mixed with water and used for external wash

PROPERTIES OF TRIAL DRUGS

INTERNAL MEDICINE

KUKKIL CHOORANAM:

குக்கில்:

Botanical Name	:	Commiphora Mukkul
Family	:	Burseraceae
Parts used	:	Resin
செய்கை	:	உடற்றேற்றி, வளியடக்கி

பொதுகுணம்

‘காததர நாசிநோய் கட்டிகடி மேகப்புண்

வாதவித்தி ரஞ்சுலை வன்குநக - மோதிவையித்

திக்கி லிருக்கத் திடமுமுள வோவுபயக்

குக்கி லிருக்கநமக் குள்”

இதனால் காணாவிடம், மேகம், ரணம், வாதவித்திரதி, கீல்பிடிப்பு, நகங்களைப் பற்றிய விரணம் முதலியவை தீரும்.

Constituents:

Resin Gum, Volatile Oil, Bitter principle

2. பறங்கிப்பட்டை

Botanical name	:	Smilax china
Family	:	Liliaceae
Parts used	:	Root

சுவை	:	இனிப்பு
செய்கை	:	உடற்றேற்றி, மேகப்பிணிவிலக்கி, காமப்பெருக்கி, தூய்மையாக்கி.
சுத்திமுறை	:	பொடித்து பாலில் வேகவைத்து எடுத்துக் கொள்ளவும்

பொதுகுணம்

‘தாகம் பலவாதந் தாதுநட்டம் புண்பிளவை

மேகங் கடிகிரந்தி வீழ்முலந் - தேகமுடன்

குட்டை பகந்தமேற் கொள்வமனம் போம்பறங்கிப்

பட்டையினை யுச்சரித்துப் பார்”

இதனால் நீர்வேட்கை, பற்பல வளிநோய், புண், பிளவை, நீரிழிவு, கடிவிடம், சிரங்கு, மூலமுளை, முடவாதம், குறைநோய், ஐயம், மகரந்தப்புண், வாந்தி இவை நீங்கும்.

Constituents :

Taxifolin – 3 – 0 – glycoside, Oxyresveratrol, Saponins, Smilaxin, Prosapogenin A, Gracillin, Mehygracilin.

3. கந்தகம்

Chemical Name : Sulphur

சுவை : கைப்பு, துவர்ப்பு

செய்கை : பித்தநீர்ப்பெருக்கி, மலமிளக்கி, உடல்தேற்றி,
வியர்வை பெருக்கி, கிருமிநாசினி

சுத்திமுறை : கந்தகத்தை ஒரு இரும்புக் கரண்டியிலிட்டு
சிறிது பசுவெண்ணெய் இட்டு உருக்கிப்
பசும்பாலில் சாய்க்கவும். இவ்விதம் முப்பது
முறை செய்ய கந்தகம் சுத்தியாம்.

பொதுகுணம்:

‘நெல்லிக்காய்க் கந்திக்கு நீள்பதினெண் குட்டமந்தம்

வல்லை கவிசைகுன்ம வாயுகண்ணோய் - பொல்லா

விடக்கடிவன் மேகநோய் வீறுசுரம் பேதி

திடக்கிரக ணீகபம் போந்தேர்”

இதனால் பதினெட்டு வகையான குட்டங்கள், மந்தம், கல்லீரல்,
வீக்கம், பெருவயிறு, குன்ம வாயு, கண்ணோய்கள், நாட்பட்ட மேக நோய்கள்,
நாட்பட்ட கிரகணி, கபம் போகும்.

4. மிளகு:

Botanical Name : Piper Nigrum

Family : Piperaceae

Parts used : Fruit

சுவை : கைப்பு, கார்ப்பு

செய்கை : அகட்டுவாய்வகற்றி, முறைவெப்பகற்றி,
வெப்பமுண்டாக்கி, வீக்கங்கரைச்சி
வாதமடக்கி, நச்சரி

பொதுகுணம்:

‘சீதசுரம் பாண்டு சிலேத்மங் கிராணிகுன்மம்
வாதம் அருசிபித்தம் மாமூலம் - ஓதுசன்னி
யாசமபஸ் மாரம் அடன்மேகம் காசமிவை
நாசங் கறிமிளகினால்”

இதனால் குளிர்சுரம், பாண்டு, கிராணி, குன்மம், வாதம், பித்தம், மூலம், சன்னி அபஸ்மாரம், மேகம், காசம் தீரும்.

Constituents:

Piperine, Piperide, Carvone, Carvacrol.

5. குரோசாணி ஓமம்

Botanical Name : Hyoscyamus Niger

Family : Solanaceae

Parts used : Seeds

சுவை : கார்ப்பு, சிறுகைப்பு

செய்கை : உறக்கமுண்டாக்கி, தாதுவெப்பகற்றி,
துயரடக்கி, இசிவகற்றி,
சிறுநீர்குறைபடப்பெருக்கி

பொது குணம்:

‘வெகுமுத் திரம்வாதம் வீரியநட் டம்புண்
உகு பேதி யுட்கடுப்பி னோடே - மிகுகரப்பான்
தீராக் கபமிவைபோம் செய்யகு ரோசானியென்றால்
வாரா மயக்கமுறு மால்”

இதனால் மிகுதியாக சிறுநீர் கழித்தல், புண், கழிச்சல், கடுப்பு, கரப்பான், ஐயநோய்கள், வன்மைக் குறைவு தீரும்.

Constituents:

Tropane alkaloids, Hyoscyamine, Scopolamine

6. சாதிக்காய்

Botanical Name : Myristica fragrans.

Family : Myristicaceae

Parts used : Fruit

சுவை : துவர்ப்பு, கார்ப்பு

செய்கை : வெப்பமுண்டாக்கி, அகட்டுவாய்வகற்றி,
மூர்ச்சையுண்டாக்கி, மணமூட்டி,
காமப்பெருக்கி, உரமாக்கி.

பொதுகுணம்:

‘தாது நட்டம் பேதி சருவாசி யஞ்சிர நோய்

ஓதுசுவா சங்காசம் உட்கிரணி - வேதோ

டிலக்காய் வரும்பிணிபோம் ஏற்றமயல் பித்தங்

குலக்கா யருந்துவர்க்குக் கூறு”

இதனால் விந்து குறைவு, பெருங்கழிச்சல், வாயுவினாலுண்டாகும் நோய், தலைவலி, இரைப்பு, இருமல், நாட்பட்ட கழிச்சல், வெப்பத்தை முன்னிட்டு வரும் பிணிகள் இவைகள் போகும்.

ஆனால், மயக்கத்தைத் தரும். மேலும் இது, வயிற்றுவலி, வயிற்றுப்பொருமல், அக்கினி மந்தம் இவைகளை போக்கும்.

Constituents: Myristine, Myristic acid, Essential oil

7. சிற்றரத்தை

Botanical Name	:	Alpinia Officinarum
Family	:	Zingiberaceae
Parts used	:	Rhizome
சுவை	:	கார்ப்பு
செய்கை	:	கோமையகற்றி, வெப்பகற்றி, பசித்தீத்தூண்டி

பொதுகுணம்:

*‘தொண்டையிற்கட் டுங்கபத்தைத் தூரத் தூரத்திவிடும்
பண்டைச்சீ தத்தைப் பறக்கடிக்கும் - கெண்டைவிழி
மின்னே! கரப்பனைவே றாக்கும் பசிகொடுக்கும்
சொன்னோம் அரத்தைச் சுகம்’*

இதனால் நெஞ்சுக்கோழை, ஈளை, இருமல், நாட்பட்ட ஐயம், கரப்பான், மார்புநோய், வீக்கம், பல்நோய், வாதசோணிதம், தீச்சுரத்தாற் பிறந்த ஐயம் போக்கும்.

Constituents:

Alpinin, Galangol, Galangin, Methyl Cinnamate.

8. நெல்லிமுள்ளி

Botanical Name	:	Phyllanthus emblica
Family	:	Euphorbiaceae
Parts used	:	Fruit

சுவை : புளிப்பு, துவர்ப்பு, இனிப்பு
செய்கை : குளிர்ச்சியுண்டாக்கி, சிறுநீர்ப்பெருக்கி,
மலமிளக்கி

பொதுகுணம் :

‘நெல்லிக்காய்க் குப்பித்தம் நீங்கு மதன்புளிப்பால்

செல்லுமே வாதமதிற் சேர்துவரால் - சொல்லுமையம்

ஓடுமிதைச் சித்தத்தில் உன்ன அனலுடனே

கூடுபிற மேகமும் போங் கூறு”

இதனால் வெறி, ஐயநோய், பீனசம், வாய்நீர்ச் சுரப்பு, வாந்தி,
மயக்கம், தலைச்சுழலல், மலபந்தம், பிரமேகம் போகும்.

Constituents:

Emblicanin A, Emblicanin B, Tannin, Ellagic acid, Vit –C

9. திப்பிலி

Botanical Name : Piper longum

Family : Piperaceae

Parts used : Fruit

சுவை : இனிப்பு

செய்கை : வெப்பமுண்டாக்கி, அகட்டுவாயுவகற்றி

பொதுகுணம்:

“ஆசனநோய் தொண்டைநோய் ஆவரண பித்தமுதல்
நாசிவிழி காதிவைநோய் நாட்புழுநோய் - வீசிடுவி
யங்கலாஞ்ச னஞ்சிதையும் அம்பாய் அழிவிந்தும்
பொங்கலாஞ்ச நங்கையர்கோட் போல்”

இதனால் ஆசனநோய், தொண்டைநோய், பித்தம், கண், காது, மூக்கு
இவற்றைப் பற்றிய நோய், புழுநோய் முதலியவை தீரும்.

Constituents:

Cubebin, Cubebinone, Cubebinin, Cubebin, Piperenone.

10. சாதிபத்திரி

Botanical Name : Myristica fragrans
Family : Myristicaceae
Parts used : Aril
சுவை : கார்ப்பு, துவர்ப்பு
செய்கை : காமப்பெருக்கி, அகட்டுவாய்வகற்றி
வெப்பமுண்டாக்கி, உறக்கமுண்டாக்கி.

பொதுகுணம்:

‘சாதிதரும் பத்திரிக்குத் தாபச் சுரந்தணியும்
ஓதுகின்ற பித்தம் உயருங்காண் - தாதுவிர்த்தி
யுண்டாங் கிரகணியோ டோதக் கழிச்சலறும்
பண்டாங் குறையே பகர்”

இதனால் தாபசுரம், நிணபேதி, நீர்க்கழிச்சல் போகும்.

11. தான்றித்தோல்

Botanical Name	:	Terminalia bellirica
Family	:	Combretaceae
Parts used	:	Fruit
சுவை	:	துவர்ப்பு
செய்கை	:	துவர்ப்பு, கோழையகற்றி, மலமிளக்கி, உரமாக்கி

பொதுகுணம்:

*‘சிலந்திவிடம் காமியப்புண் சீழான மேகங்
கலந்துவரும் வாதபித்தங் காலோ டலர்ந்துடலில்
ஊன்றிக்காய் வெப்ப முதிரபித் துங்கரக்குந்
தான்றிக்காய் கையிலெடுத்த தால்”*

இதனால் சிலந்திநஞ்சு, ஆண்குறிப்புண், வெள்ளை, குருதி அழல்
நோய், வளி தீ குற்றங்களால் வரும் நோய்கள் தீரும்.

Constituents:

β – sistosterol, Gallic acid, Ellagic acid, Mannitol.

12. சீரகம்

Botanical Name	:	Cuminum cyminum
Family	:	Umbelliferae
Parts used	:	seeds
சுவை	:	கார்ப்பு, இனிப்பு

செய்கை : அகட்டுவாய்வகற்றி, வெப்பமுண்டாக்கி,
பசித்தீத்தாண்டி, துவர்ப்பி

பொதுகுணம் :

*‘பித்தமெனு மந்திரியைப் பின்னப் படுத்தியவன்
சத்துருவை யுந்துறந்து சாதித்து - மந்தனெனும்
ராசனையு மீவென்று நண்பைப் பலப்படுத்தி
போசனகு டாரிசெயும் போர்’*

இதனால் அழல், வயிற்றுவலி, வாய்நோய், ஈரல் நோய், காசம், கல்லடைப்ப, குருதிக்கழிச்சல், இரைப்பு, கம்மல், மூக்குநீர் பாய்தல், வெறி, வளிநோய்கள் விலகும்.

Constituents:

Cuminoside A, Cuminoside B, Sesquiterpenoid glucosides.

EXTERNAL MEDICINE
VIRANA SANJEEVI THYLAM

1. சேராங்கொட்டை

Botanical Name	:	Semecarpus anacardium
Family	:	Anacardiaceae
Parts used	:	Fruit
சுவை	:	கைப்பு, விறுவிறுப்பு
செய்கை	:	உடற்றேற்றி, புண்ணாக்கி

பொதுகுணம்:

‘குட்டங் கயரோகங் கொல்லும் விடபாகந்

துட்டந் தருகிருமி சூலையும் போம் - மட்டலருங்

கூந்தன்மயி லேகிரந்திக் கூட்டம் போஞ் செங்கையில்

ஏந்துசேங் கொட்டைதனை யே”

இதனால் பெருநோய், இளைப்பு நோய், நஞ்சு, திமிர்ப்படை, கருப்புப்படை, வெண்படை, தீராக்கடி முதலியவை தீரும்.

Constituents:

Bhilawanol, Biflavanone, Semecarpetin, Semecarpol, Anacardic acid.

2.தாளகம்

Chemical Name	:	Yellow Arsenic Trisulphide
வேறுபெயர்கள்	:	பீதகி, ஆலம்பி, பிஞ்சனம், பழுப்பு, மால்தேவி, மஞ்சள் வர்ணி
செய்கை	:	உடல்தேற்றி, சுரமகற்றி

பொதுகுணம்

‘தாளகத்தின் பேருரைக்கத் தாலுகவுள் நோய்குஷ்டம்

நீளக் குளிர்காய்ச்சல் நீடுகபம் - நாளகங்கொள்

துஷ்டப் பறங்கிப்புண் சூழமுகண் மண்டைநோய்

கிட்டப் படுபமா கிளத்து”

இதனால் நாக்கு கபாலம் பற்றிய நோய், குட்டம், குளிர்கரம், கபம், மூத்திர நாளத்தைப் பற்றிய பறங்கிப்புண், அழுகண், மண்டைநோய் தீரும்.

3. நல்லெண்ணெய்

Name	:	Gingelly oil
Botanical name	:	Sesamum indicum
Family	:	Pedaliaceae
Parts used	:	Oil from seeds
செய்கை	:	உள்ளழலாற்றி, மளமிளக்கி, உடலுரமாக்கி, வறட்சியகற்றி

பொதுகுணம்

‘புத்திநயனக்குளிர்ச்சி பூரிப்பு மெய்ப்புளகஞ்

சத்துவங் கந்தி தனியிளமை - மெத்தவுண்டாங்

கண்ணோய் செவிநோய் கபாலவழல் காசநோய்

புண்ணோய்போ மெண்ணெய்யாற் போற்று”

இதனால் புத்திக்குத் தெளிவு, விழிகளுக்குக் குளிர்ச்சி, உடல் பூரிப்பு, உடல் வன்மை வருவதோடு, கண்ணோய், காதுநோய், தலைக்கொதிப்பு, சொறி, சிரங்கு, புண் தீரும்.

Constituents:

Sesamin, Sesamolin, Phytosterol, vit – E, Plant sterol.

ANNEXURE - II
GOVT SIDDHA MEDICAL COLLEGE- PALAYAMKOTTAI
BIOCHEMICAL ANALYSIS OF KUKKIL CHOORNAM

PREPARATION OF THE EXTRACT: 5gms of the drug was weighed accurately and placed in a 250ml clean beaker. Then 50ml of distilled water added to it and dissolved well. Then it was boiled well for about 10 minutes. It was cooled and filtered in a 100ml volumetric flask and then it is made up to 100ml with distilled water. This fluid was taken for analysis.

Qualitative Analysis

S.No.	Experiment	Observation	Inference
1.	<u>Test for calcium</u> 2ml of the above prepared extract is taken in a clean test tube. To this add 2 ml of 4% ammonium oxalate solution.	A white precipitate is formed.	Indicates the presence of calcium.
2.	<u>Test for sulphate:</u> 2ml of the extract is added to 5% barium chloride solution.	No white precipitate is formed.	Indicates the Absence of sulphate.
3.	<u>Test for chloride</u> The extract is treated with silver nitrate solution.	No white precipitate is formed.	Indicates the absence of chloride.

4.	<u>Test for carbonate</u> The substance is treated with concentrated HCl.	No brisk effervescence is formed.	Absence of carbonate.
5.	<u>Test for Starch</u> The extract is added with potassium ferro cyanide.	Blue colour is formed	Indicates the presence of Starch
6.	<u>Test for iron Ferric</u> The extract is treated with concentrated glacial acetic acid and potassium ferro cyanide.	No blue colour is formed.	Absence of ferric iron.
7.	<u>Test for iron Ferrous:</u> The extract is treated with concentrated nitric acid and ammonium thio cyanate.	Blood red colour is formed.	Indicates presence of ferrous iron.
8.	<u>Test for phosphate</u> The extract is treated with ammonium molybdate and concentrated nitric acid.	No Yellow precipitate is formed.	Indicates the Absence of phosphate.
9.	<u>Test for albumin</u> The extract is treated with Esbach's reagent.	No yellow precipitate is formed.	Absence of albumin.
10.	<u>Test for Tannic acid</u> The extract is treated with ferric chloride reagent.	No Blue black precipitate is formed	Indicates the absence of Tannic acid
11.	<u>Test for unsaturation</u> Potassium permanganate solution is added to the extract.	It gets decolorized.	Indicates the presence of unsaturated compound.

12.	<p><u>Test for the reducing sugar</u></p> <p>5ml of benedict's qualitative solution is taken in a test tube and allowed to boil for 2 mts and added 8-10 drops of the extract and again boil it for 2 mts.</p>	No Colour change occurs.	Indicate the absence of reducing sugar
13.	<p><u>Test for amino acid:</u></p> <p>One or two drops of the extract are placed on a filter paper and dried it well. After drying, 1% ninhydrin is sprayed over the same and dried it well.</p>	No Violet colour is formed.	Indicates the absence of Amino acid.
14.	<p><u>Test for zinc:</u></p> <p>The extract is treated with potassium ferrocyanide</p>	No white precipitated	Absence of zinc

Result:

The trial drug **KUKKIL CHOORNAM** contains

- *Calcium*
- *Starch*
- *Ferrous iron*
- *Unsaturated compound*

PHARMACOLOGICAL ANALYSIS

WOUND HEALING EFFECT OF VIRANA SANJEEVI THYLAM

Aim:

To study the wound healing effect of Virana sanjeevi thylam on Albino Rats.

Procedure:

The experiment was conducted on 6 albino rats (both sex) weighing 200-300 g. The animals were caged individually in a controlled environment (temperature 30 ° C). Food and water were available to the rats. For carrying out the experiment, Institutional Animal Ethics Committee permission was taken.

Prior to creating excisional wounds the rats were anesthetized and then the animals were shaved on the back and the skin was disinfected using cotton and alcohol wipes. Using sterile surgical instruments round full thickness skin wounds measuring 500 mm² were created in the paravertebral area, 1.5 mm from midline on the back of rats. 0.1ml of Staphylococcus aureus organism from the peptone water medium maintained at 37°C is injected into the subcutaneous area of the excision wounds created in the albino rats.

All the 6 rats were then randomly allocated to three groups, each group containing two rats each, namely control (Group A), standard (Group B) and treatment (Group C). For the treatment Virana sanjeevi thylam was

applied over the wound surface of Group C rats twice daily. For the standard Neomycin was applied over the wound surface of Group B rats twice daily. Control Group A received no drug treatment. The applications continued for 14 days from the start of the experiment.

To measure the contracture of the wound, a transparent plastic paper was placed on the location of wound and its shape was drawn on the same paper with a marker and then matched with the graph paper for finding the area of the wound (expressed in mm²).

Wound healing was measured on Days 2, 4, 6, 8, 10, 12 and 14 of the experiment. Percentage of wound healing was calculated according to the Walker formula.

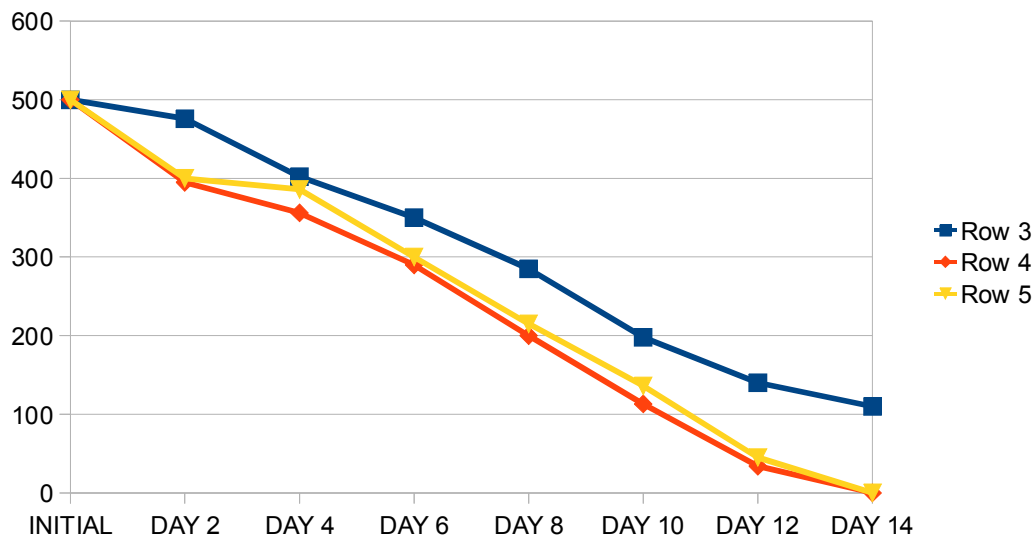
The total number of days required for complete epithelization of the wound was noted in each rat in both the groups (e.g. fall of scab without any raw area)

Results are tabulated below,

Readings of wound area in sq.mm								
Groups	Initial	Day2	Day 4	Day 6	Day 8	Day 10	Day 12	Day 14
Group A	500	476	402	350	285	198	132	109
Group B	500	395	356	290	200	113	34	0
Group C	500	400	386	300	215	136	45	0

Percentage of wound area = Wound area on day X/ Wound area on day 1 x 100

Percentage of wound healing = 100-Percentage of wound area



X- Axis refers to the size of the wound created in the rats

Y- Axis refers to the days treated

Row - 3 – Control, Row – 4 Standard, Row – 5 Test

Percentage of wound healing								
Groups	Initial	Day 2	Day 4	Day 6	Day 8	Day 10	Day 12	Day 14
Group A	0	4.2	11.6	30	39	58.4	62.6	65.2
Group B	0	21	28.8	42	60	77.4	93.2	100
Group C	0	20	22.8	40	57	72.8	91	100

Inference:

Hence our trial drug Virana sanjeevi thylam has significant wound healing action equal to that of the modern drug Neomycin comparison showed in the graph plotted above.

ACUTE ANTI - INFLAMMATORY STUDY ON VIRANA

SANJEEVI THYLAM(EXTERNAL USE)

BY HIND-PAW METHOD IN ALBINO RATS

Aim:

To study the acute anti-inflammatory activity of the test drug
VIRANA SANJEEVI THYLAM

Preparation of the test drug:

The *Virana Sanjeevi Thylam* was prepared as per the preparation given in *Theran thaila varkka churukkam*.

Procedure:

Nine healthy albino rats weighing 100-150gm were taken and divided into three groups, each consisting of 3 rats.

First group was kept as control by giving distilled water of 2ml/100gm of body weight. The second group was kept as test group. The third group was given the standard drug.

Before application of the test drug the Hind-paw volume of all the rats were measured. This was done by dipping the Hind-paw up to the tibio-femoral junction into a mercury plethysmograph. While dipping the Hind-paw, by pulling the syringe piston, the level of mercury in the centre small tube was made to coincide with red marking and reading was noted from the plethysmograph.

One hour later, a sub-cutaneous injection of 0.1ml of 1 % (w/r) Carrageenan was made into the plantar surface of both Hind-paw of each rat. To the second (last) group *Virana Sanjeevi thylam* was topically applied for three times over the inflamed surface in a thin layer for every 15mts for an hour. To the control group no drug was applied over the inflamed surface. To the standard group the standard drug Ibuprofen in a dose of 20mg/100gm body weight was given.

Three hours after injection the Hind-paw volume was measured once again. The difference between the initial and final volume would show the amount of inflammation. Taking the volume in the control group as 100% of inflammation, anti – inflammatory effect of the test group is calculated.

EFFECT OF VIRANA SANJEEVI THYLAM

Group	Drugs	Dose 100 gm of body weight	Initial value	Final value	Difference	Percentage Inflammation	Percentage Inhibition
Control	Water	2ml	0.55	1.4	0.85	100	-
Standard	Ibuprofen	20mg	0.55	0.75	0.20	23.5	76.5
Test drug	Virana sanjeevi thylam	Ext	0.65	1.0	0.35	41.1	58.9

Inference:

The test drug has SIGNIFICANT anti-inflammatory action externally

ANNEXURE – 4

ASSESSMENT FORM

FORM I	-	SCREENING & SELECTION PROFORMA
FORM II	-	CLINICAL ASSESSMENT ON ENROLLMENT
FORM II A	-	CLINICAL ASSESSMENT DURING & AFTER TRIAL
FORM III	-	LABORATORY INVESTIGATION ON ENROLLMENT & CONCLUSION OF TRIAL
FORM IV	-	CONSENT FORM
FORM IV A	-	WITHDRAWAL FORM
FORM IV B	-	DRUG COMPLIANCE FORM

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VIRANAM (SKIN ULCERS).

FORM I - SCREENING & SELECTION PROFORMA

1. OP /IP NO: -----

2. NAME: -----

3. RELIGION: H / C / M / O

4. AGE/GENDER: -----

5. OCCUPATION: -----

6. INCOME: -----

7. CONTACT NUM: -----

8. INCLUSION CRITERIA

- Age :15-60 yrs
- Sex : Both male and female
- Willing to give specimen of blood for the investigation whenever required.

- Willing for admission and study in IPD for 40 days or willing to attend OPD
- Acute and chronic ulcers

9. EXCLUSION CRITERIA:

- Age below 15 and above 60
- Pregnant and lactating women
- Severe renal, hepatic, cardiac diseases
- Malignant ulcers
- Uncontrolled diabetes
- Syphilitic ulcers
- Ischaemic ulcers

ADMITTED TO TRAIL:

YES

NO

If Yes Serial NO:

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

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**FORM II AND II-A CLINICAL ASSESSMENT ON ENROLLMENT
AND ON VISITS**

- 1. OP/ IP No:**
- 2. BED No:**
- 3. Sl. No:**
- 4. NAME:**
- 5. AGE:**
- 6. GENDER:**
- 7. OCCUPATION:**
- 8. SOCIAL STATUS:**
- 9. DATE OF ADMISSION:**
- 10. DATE OF DISCHARGE:**
- 11. POSTAL ADDRESS:**

12. COMPLAINTS & DURATION:

13. HISTORY OF PRESENT ILLNESS:

14. PAST HISTORY:

15. FAMILY HISTORY:

16. MENSTRUAL HISTORY (If applicable):

17. HABITS:

1. Smoker
2. Alcoholic
3. tobacco chewer
4. betel nut chewer
5. Non-Vegetarian
6. Drug addiction

18. GENERAL EXAMINATION:

1. Body weight [Kg]
2. Height [cm]
3. Body Temperature [F]
4. Blood Pressure (mmHg)
5. Pulse Rate /min.
6. Heart Rate /min.
7. Respiratory Rate /min.
8. Pallor

9. Jaundice
10. Clubbing
11. Cyanosis
12. Pedal Oedema
13. Lymphadenopathy
14. Jugular venous pulsation

19. CLINICAL EXAMINATION:

I. INSPECTION:

- Size
- Shape
- Number
- Position
- Edge
- Floor
- Discharge
- Surrounding area

II. PALPATION

- Tenderness
- Depth
- Edge and margin
- Base

- Bleeding
- Relation with deeper structures

III.EXAMINATION OF LYMPH NODES

IV.EXAMINATION FOR VARICOSE VEINS

V.EXAMINATION FOR NERVE LESION

VI. CLINICAL ASSESSMENT:

- History of ulcer
- Anatomical site
- Appearance of lesion
- Surrounding skin

20. EXAMINATION OF OTHER SYSTEMS:

- CVS
- RS
- CNS
- ABDOMEN
- GENITO-URINARY

EXAMINATION - SIDDHA ASPECTS

1 . NILAM:

1. Kurinji 2. Mullai 3. Marutham 4. Neithal 5. Paalai

2 . KAALAM:

- | | | |
|-------------------|--------------------|---------------------|
| 1. Kaar Kaalam | 2. Koothir Kaalam | 3. Munpani Kaalam |
| 4. Pinpani Kaalam | 5. Ilavenir Kaalam | 6. Muduvenir Kaalam |

3. YAAKKAI:

- | | | |
|----------------|----------------|---------------|
| 1. Vatham | 2. Pitham | 3. Kabam |
| 4. Vathapitham | 5. Pithavatham | 6. Kabavatham |
| 7. Vathakabam | 8. Pithakabam | 9. Kabapitham |

4. GUNAM:

- | | | |
|-------------|-------------|-------------|
| 1. Sathuvam | 2. Rasatham | 3. Thamasam |
|-------------|-------------|-------------|

5. KANMENDHIRIUM / KANMAVIDAYAM

1. Kai
2. Kaal
3. Vaai
4. Eruvaai
5. Karuvaai

6. UYIR THATHUKKAL:

I. VATHAM:

1. Piraanan
2. Abaanan
3. Viyaanan
4. Uthaanan

5. Samaanan
6. Naagan
7. Koorman
8. Kirukaran
9. Devathathan
10. Dhananjeyan

II. PITHAM :

1. Analam
2. Ranjagam
3. Saathagam
4. Aalosagam
5. Praasagam

III. KABAM:

1. Avalambagam
2. Kilethagam
3. Pothagam
4. Tharpagam
5. Santhigam

7. UDAL THAATHUKKAL:

1. Saaram
2. Senneer
3. Oon

4. Kozhuppu
5. Enbu
6. Moolai
7. Sukkilam / Suronitham

8. ENVAGAI THERVUGAL:

1. Naadi
2. Sparisam
3. Naa
4. Niram
5. Mozhi
6. Vizhi
7. Malam

Niram: Thanmai: Irugal: Ilagal :

8. Moothiram:

I. NEERKURI:

- a. Niram
- b. Manam
- c. Edai
- d. Nurai
- e. Enjal

II. NEIKURI:

Vatha Neer

Pitha Neer

Kaba Neer

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

2 . URINE

- Albumin
- Sugar
- Deposits

II. SPECIFIC INVESTIGATIONS

1. Bacteriological examination of the discharge of the ulcer.

2. Skin test:

Mantoux test

3. Biopsy:

III. Chest X-Ray:

1. **X-Ray of bone and joint:**

2. **Contrast radiography:**

- Arteriography
- Phlebography

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

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FORM IV A - CONSENT FORM

CERTIFICATE BY INVESTIGATOR

I certify that I have disclosed all the details about the study in the terms readily understood by the patient.

Signature.....

Date.....

Name.....

CONSENT BY PATIENT

I have been informed to my satisfaction, by the attending physician, the purpose of the clinical trial, and the nature of drug treatment and follow-up including the laboratory investigations to be performed to monitor and safeguard my body functions.

I am aware of my right to opt out of the trial at any time during the course of the trial without having to give the reasons for doing so.

I exercising my free power of choice, hereby give my consent to be included as a subject in the clinical trial of ‘KUKKIL CHOORNAM (Internal drug)’ and ‘VIRANA SANJEEVI THYLAM (External drug)’ for the treatment of “VIRANAM(SKIN ULCERS)”.

Place:

Signature

Date:

Name

Witness

அரசினர் சித்த மருத்துவக் கல்லூரி மற்றும் மருத்துவமனை

பாளையங்கோட்டை

பட்டமேற்படிப்பு சிறப்புமருத்துவத்துறை

‘குக்கில் சூரணம்” மற்றும் “விரண சஞ்சீவி தைலம்” இவற்றின்
பரிகரிப்புத்திறனைக் கண்டறியும் மருத்துவ ஆய்வுஒப்புதல்
படிவம்ஆய்வாளரால் சான்றளிக்கப்பட்டது

நான் இந்த ஆய்வைக் குறித்த அனைத்து விபரங்களையும்
நோயாளிக்கு புரியும் வகையில் எடுத்துரைத்தேன் என உறுதியளிக்கிறேன்.

தேதி:

கையொப்பம்:

இடம்:

பெயர்:

நோயாளியின் ஒப்புதல்

என்னிடம் இந்த மருத்துவ ஆய்வின் காரணத்தையும் மருந்தின்
தன்மை மற்றும் மருத்துவ வழிமுறையைப் பற்றியும் தொடர்ந்து எனது உடல்
இயக்கத்தை கண்காணிக்கவும், அதனைப் பாதுகாக்கவும் பயன்படும்
மருத்துவ ஆய்வுக்கூட பரிசோதனைகள் பற்றியும் திருப்தி அளிக்கும்
வகையில் ஆய்வு மருத்துவரால் விளக்கிக் கூறப்பட்டது.

நான் இந்த மருத்துவ ஆய்வின் போது காரணம் எதுவும் கூறாமல்
எப்பொழுது வேண்டுமானாலும் இந்த ஆய்விலிருந்து என்னை விடுவித்துக்
கொள்ளும் உரிமையை தெரிந்திருக்கின்றேன்.

நான் என்னுடைய சுதந்திரமாகத் தேர்வு செய்யும் உரிமையைக்
கொண்டு விரணம் என்னும் நோய்க்கான,குக்கில் சூரணம்” மற்றும் “விரண
சஞ்சீவி தைலம்” ஆகியவற்றின் பரிகரிப்புத் திறனைக் கண்டறியும் மருத்துவ
ஆய்விற்கு என்னை உட்படுத்த ஒப்புதல் அளிக்கிறேன்.

தேதி:

கையொப்பம்:

இடம்:

பெயர்:

சாட்சிக்காரர் கையொப்பம்:

பெயர்:

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(SKIN ULCERS).

FORM IV B - WITHDRAWAL FORM

1. SI NO: -----
2. OP /IP NO: -----
3. NAME: -----
4. RELIGION : H / C / M / O
5. AGE/GENDER: -----
6. OCCUPATION: -----
7. SOCIAL STATUS: -----
8. CONTACT NUM: -----
9. DATE OF TRIAL COMMENCEMENT: -----
10. DATE OF WITHDRAWAL FROM TRIAL: -----
11. REASONS FOR WITHDRAWAL:

- | | |
|---|---------|
| • Long absence at reporting : | Yes/ No |
| • Irregular treatment: | Yes/ No |
| • Shift of locality : | Yes/ No |
| • Increase in severity of symptoms: | Yes/ No |
| • Development of severe adverse drug reactions: | Yes/ No |

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

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FORM IV C - DRUG COMPLIANCE FORM

Name of the Drug: KUKKIL CHOORNAM

Drugs issued : (Mgs/Grams)

Drugs returned : (Mgs/Grams)

S.NO	DATE	DRUG TAKEN TIME	
		MORNING/TIME	EVENING/TIME
Day 1			
Day 2			
Day 3			
Day 4			
Day 5			
Day 6			
Upto 40 Days			

Date:

Station:

Signature of the Investigator:

Signature of the Lecturer:

Signature of the HOD

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- **Viranam karappan roga chikitchai**
- **Aruvai maruthuvam – Dr. K.S Utthamarayan H.P.I.M**
- **Noi nadal noi muthalnadal Part I –Dr. Shanmugavelu**
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- **The Legacy of Sushruta**
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- **Das clinical surgery**
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- **Management of wound healing – Vijay K Shukla and Rajmani**
- **Behl's dermatology**
- **Robbinson's Pathology**
- **Bailey and Love's short practice of surgery**
- **Toxicology and Clinical Pharmacology of Herbal products**